



STEAM educational approach and foreign language learning in Europe



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A trip to Pompeii



UNIVERSIDAD DE GRANADA



A trip to Pompeii

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Consortium SELFIE - STEAM Educational Approach And Foreign Language Learning In Europe

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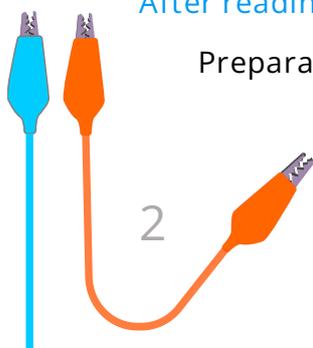


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Theoretical aspects of the Selfie model

SeLFiE Model

The set of SeLFiE tools that are presented in this booklet take the innovative didactic approaches of STEAM (Science, Technology, Engineering, Art and Mathematics) and integrate them with approaches to learning a second language. The radically innovative potential of the SeLFiE model is found in its capacity to integrate scientific language, which tends to be simpler and easier to understand for students, with the rich daily language and practical vocabulary of the Content and Language Integrated Learning (CLIL) framework.

An integrated approach is proposed, based on the completion of projects through the use of stories that link up different curricular areas. In this way, attractive learning experiences are achieved through teaching models such as Research-Based Learning (RBL) and engineering design.

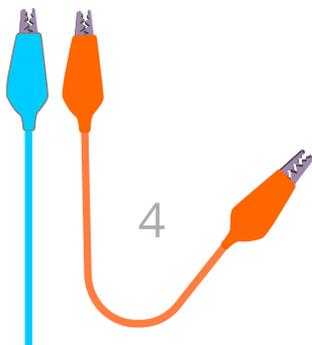
Project partners

This project was coordinated at the University of Burgos working in collaboration with two other universities: the University of Malta (UM), Malta, and the University of Granada (UGR), Spain. The International Trilingual School of Warsaw (ITSW), Poland, also participated; the Centre for Teacher Training and Educational Innovation (CFIE) of Burgos, Spain, a public teacher-training institute that forms part of the Regional Government in Spain for training infant, primary and secondary school teachers; and Kveloce R&D+I, an expert consultancy for the implementation of European projects.

The partners have worked together to develop the SeLFiE model and to compile examples of good practice among working teachers across Europe. See the following websites to find these and other information on the Project and on its YouTube channel:

project-selfie.eu/

www.youtube.com/channel/UCjF4_Jhz0gcbIV2cjpHkmiw/featured





Characteristics and focus of the SeLFiE model

With regard to the characteristics of the project, its main objective is to improve the competences of bilingual infant and primary education teachers for the application of STEAM teaching methods to further the learning of a second language; as well as to improve the general STEAM and foreign-language-related competencies of student teachers of infant and primary education across Europe. Thus, a new method emerges for teaching STEAM in a bilingual context: the SeLFiE model.

This model seeks to promote a wholistic approach for the acquisition of skills in a second language (English, Spanish, French or any other second language in the first stage of education) through STEAM topics at the same time as integrating a series of active teaching methods, mainly: the Project-Based Learning (PBL) approach; Inquiry-Based Learning (IBL); Engineering Design Process (EDP) in scientific education; and, Content and Language Integrated Learning (CLIL).

In this way, the narration of stories is used to provide a context that links up the content areas. Thanks to which, the learning is really authentic; it will better reflect the real world and will adapt the learning to different contexts, as well as stimulating emotions and motivation that are so important to achieve significant learning.

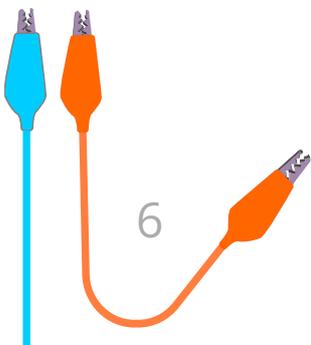
Balance between language and content in the SeLFiE model

The SeLFiE model combines the learning of STEAM materials with the learning of a second language through the use of different methods: active, inquiry-centered, student-centered and collaborative learning. The model reflects the complexity of reality, combining CLIL and integrated learning of STEAM areas.

In this context, the narration of stories, in its broadest sense, is used as a guiding thread that motivates children to commit themselves to approaching a topic, connecting one investigation with another, as the children inquire into different aspects of a story or focus themselves on a particular topic. The participation of the children in investigations that may or may not be conducted in a second language creates opportunities in which the children can communicate and collaborate while they are working, and share their conclusions with others in a language that is not their mother tongue.



Figure 1. The SeLFiE model for learning STEAM+L2 at primary school level.



Co-teaching within the SELFIE model

In the same way that different topical areas in the SELFIE model are presented in a holistic way, teachers must also work together, in order to guarantee that the project continues to be a unified whole, which requires co-teaching. This collaboration can be with other professionals, such as specialist subject teachers, but also perhaps with the teachers of the same course, the teaching assistants and the management of the center.

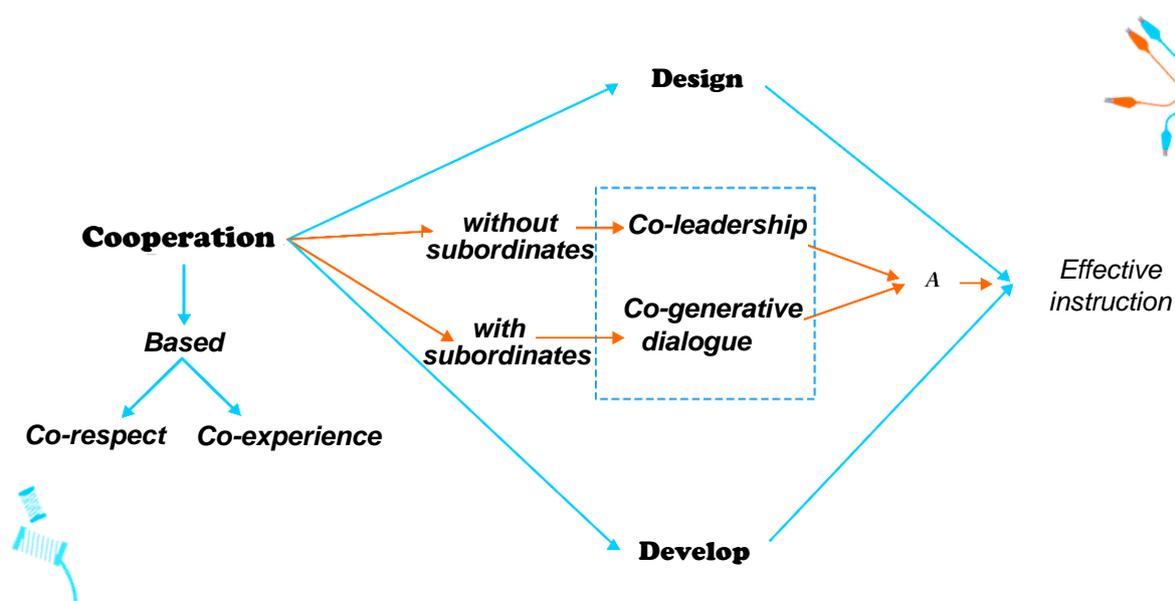


Figure 2. Relation between the different factors that determine the efficiency of co-teaching.

Co-teaching is, therefore, an integral aspect of the SELFIE model, because it is also necessary to collaborate with other teachers, if the model is really to be integrated in teaching. It must also be applied in a holistic manner, so that the learning process is also a holistic experience. Whether you speak or share the possibility of collaboration with your colleagues, the important thing is that you work together in a democratic and respectful manner, using the strong pedagogical points of each person so that learning is meaningful, creative, and fun for the students.

The SELFIE team invite you to read the set of proposals that we are presenting to you in this book, organized in the form of a project that has a storybook as its guide. As you will see, the examples of teaching experiences that we are offering you are varied and adaptable, which is why we hope that you will find the inspiration to test and to adapt some of them, in accordance with your needs.



The project



Introduction

In this project, we will use the picture book *Scape from Pompeii* (Balit, 2005) as a thread to help children develop both language skills and an understanding of everyday life in Ancient Rome. It is important to bear in mind that understanding the problems of everyday life during the Roman period connects with the problems of life today. Thus, learning Roman history has been approached from the perspective of connecting the past with the present. For example, we believe that it is easier to understand the road networks that the Romans designed and the way in which travel took place and the infrastructures they used, if the student is able to consider all these issues in their daily life. This approach enables them to be aware of needs, to consider multiple factors and to develop decision making.

The study of history has often been approached from a political and chronological perspective, but sometimes in ways that are decontextualized and difficult to understand. We propose an approach to classical Roman history that is based on the needs and problems that may have arisen for the population, rather than looking at the major historical events that determine the great stages of Roman life: Monarchy, Republic, Empire, etc. Students will understand how history is constructed on the basis of different sources: written texts, archaeological remains, etc. The children will work with different sorts of narrative texts, such as historical narrative and poetry. They will have the opportunity to learn about what happened in Pompeii through the stories of its survivors.

It is important to understand the Roman legacy in our lives. We speak almost same language that the Romans spoke some 2000 years ago, bearing in mind the linguistic changes it has undergone over time. However, the connection is evident from some of the terms used today. Moreover, family structure, and political and social organization are directly related to our Roman past. From this point of view, the city of Pompeii is particularly useful, as it allows children to approach their past through archaeology, providing tremendously well-preserved remains of the city's structure, infrastructure, housing and material remains, which facilitates this empathetic understanding of the past. In the same way, the eruption of the volcano, Mount Vesuvius, presents a problem that can be transposed to the present day, as similar eruptions take place across the world that are frequently reported in the media. The eruption of a volcano presents a situation that can easily be transferred to the study of geography and history and all social sciences.

In addition, it is possible to address an important scientific concept, such as the different types of rocks and their formation. We believe that a volcanic explosion, which is

explained in the story, can be used to help children understand rock formation better. This problem will be approached using the guided enquiry teaching methodology. The impressive engineering achievements of the Romans are part of their everyday life. Using this fact, we will introduce students to the Engineering design method, broadening their understanding of what an engineer is and allowing them to design and evaluate one of the Romans' best-known innovations for warfare: catapults. In addition, we propose that the children build 3D scale models, in their Plastic Arts classes, of other Roman engineering solutions that are still in place across Europe. In this way we can help the children to understand how engineering solutions can improve our lives, and how much the Romans influence our way of life. In addition, the children have to apply mathematical knowledge on counting, quantifiers, scales and measuring devices.

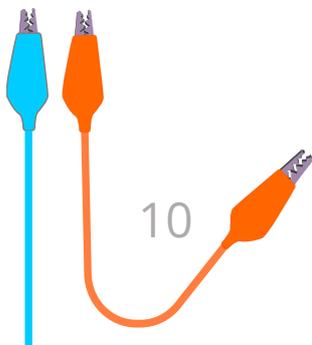
The political and economic organization of Ancient Rome developed so much that we continue to use many of its structures to this day. It is important to reflect on how the abacus helped accelerate their growth, even though Roman numerals were less sophisticated than Arabic numerals. They can help children to pin-point the year of construction of many ancient (and not so ancient) buildings in Europe. Life in Ancient Rome also had space for fun and diversion, so the children can learn about strategic and probabilistic games based on dice. They will be able to reflect on their position playing Roman tic-tac-toe and to calculate the probabilities when rolling dice.

Reading area

Books on Ancient Rome and key words from history can be placed in this area of the classroom. The students can also bring books that they have at home or that they have borrowed from a public library. The children can access the area during the time that is assigned to them, attending alone or in pairs and then sharing their opinions on the reading with their classmates.

Topic Table

Students may bring objects and toys that have some relation with the story and the content they have learnt on this project. such as family photos of Roman roads, sites of ruins, etc., can be placed in this area, on the Topic table, a place where they can go to play and to tell stories and to report experiments while making use of these materials. These objects are placed on the Topic Table, a place to which the children can go to play and to go over the story or the experiments, making use of the materials.





Characteristics

Book

Balit, C. (2005). *Escape from Pompeii*. Frances Lincoln Children's Books

- Title: Escape from Pompeii.
- Author: Christina Balit.
- Year: 2005.
- Editorial: Frances Lincoln Children's Books.
- ISBN 13: 9781845070595

School year

- This project is suitable from the 3rd-year of primary education and if working with older children, the concepts can be explored in some depth.

Subjects

- Natural and social sciences, English language, mathematics, plastic arts and musical education.

Methodologies

- Cooperative learning.
- Content and Language Integrated Learning (CLIL).
- Inquiry-based Science Teaching (IBST).
- Engineering Design.
- Problem-based learning.

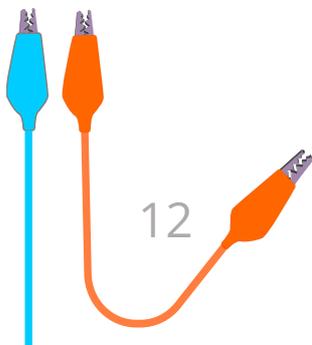
Competencies

- Communication in a foreign language.
- Mathematical competence.
- Basic competencies in science and technology.
- Learning to learn.
- Digital skills.
- Social and civic skills.
- Awareness and cultural expressions.



Objectives

- Find the geographical location of the city of Pompeii within the Roman Empire.
- Approach the study of history through its archaeological and documentary sources.
- Reflect on life in Ancient Rome and compare it with life today.
- Propose solutions to the problems derived from daily life in Roman antiquity: transport, infrastructures, housing.
- Learn about Roman legacy and reflect on its importance in our own culture.
- Learn about the characteristics and social values of classical Roman antiquity and current society.
- Develop critical thinking through reflection on real problems from classical antiquity.
- Identify the different types of rocks.
- Describe the process of rock formation.
- Understand the engineering design process.
- Design and evaluate a catapult.
- Build a 3D model.
- Listen to the work of fiction, *Scape from Pompeii*, read by the teacher and join in by making predictions, finishing sentences and answering questions.
- Derive meaning of new vocabulary from fiction and non-fiction texts.
- Read informative texts and summarize the main points.
- Write and read poems with feeling and expression.
- Give an oral presentation.
- Listen to classmates' presentations and ask questions.
- Develop cooperative tasks to prepare the final task.
- Use both Spanish and English for learning.
- Find the sample space with various dice.
- Calculate the probabilities of different events using dice.
- Think of winning strategies for various games.
- Recognize, represent, write and read Roman numerals.
- Represent numbers and manipulate them using the abacus.





Evaluation

- ✓ Techniques
 - Systematic observation.
 - Metacognition.
 - Analysis of student productions.
 - Specific test.
- ✓ Tools
 - Rubrics and list of assignments.
 - Worksheets.
 - Oral presentations and Kahoot.

Approaching the needs

- Individualization of the learning process.
- Activities when finishing rapidly.
- Scaffolding activities.
- Rewards for active participation.
- Different types of groupings.
- Activities for students with visual, auditive and kinetic orientations.

Framework

- Model and demonstration.
- Different ways of describing concepts.
- Inclusion of visual help.
- Giving the student time to speak.
- Continuous testing of student comprehension.
- Activate previous knowledge.



Before reading

Preparation

Before reading the book, it is important that you try to create a pleasant atmosphere that stimulates curiosity, that motivates and that interests the students. In doing so, you can use decorations related with the theme of the story.

In this way, the students experience different sensations, make numerous deductions and propose a stream of questions that provide insight for you into their previous ideas, their willingness to learn and interest in learning.

It is likewise convenient that you have all the materials prepared that you will need during the session. Their sequential arrangement in a specific part of the classroom will give you easy access to them, favoring dynamism during the activities and reducing the time between one task and another.

Implementation in the classroom

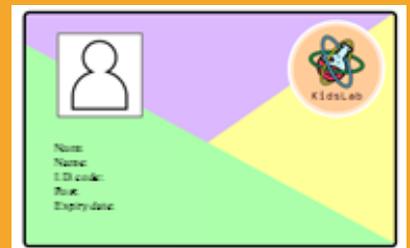
Activity 1. How we learn!

Metacognitive processes are fundamental so that the students become aware of their own cognitive processes and their regulation.

To do so, you can use thinking routines or metacognitive staircases with which to promote self-reflection among the students on their experiences and previous ideas, so that they inquire into their concerns and interests and in consequence set goals to be achieved.

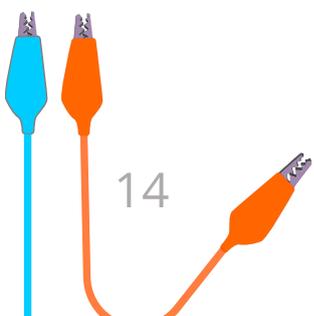
In this way, the students will visualize the progress of their learning more clearly, will interrelate concepts and skills, and will strengthen their ontogenetic development.

NOTE: As a motivational exercise, personalized identity cards can be created for each student, showing their photo and personal data, as if it were an accreditation for a scientific laboratory.



NOTE: It is recommended that this activity be carried out at times before and after learning, to gain a globalized vision of the process.

It is important to drive critical thought and analysis of the tasks, the achievements and the improvements that have been achieved, as well as the difficulties and the problems, seeing them as future learning opportunities.



MAIN EXPERIENCES

- Reflect on what you have already learnt or know about the topic.
- Set out what you want to learn, including conceptual, attitudinal and procedural knowledge.
- Reflect on what and how you have learnt.

PREPARATION

TIMING

- 3 minutes for explaining the parts that integrate the thinking routines or metacognitive staircase.
- 5-7 minutes to complete one of the sections.
- 5 minutes to share the responses together.

MATERIALS

- Photocopy of worksheet with the structure that students have to complete.
- Pencils, paints, markers, etc.

CONNECTION WITH FAMILIES

- Send regular newsletters to the families detailing student progress and learning.
- Encourage family members to reinforce the activities within the classroom at home, which can stimulate curiosity and exploration.
- Prepare a folder with activities and proposals to work on at weekends.

TEACHING PLAN

DEVELOPMENT

Knowing my learning with the KWL routine

Start explaining the importance of knowing what, how and why we learn to the students. Let them talk about it and explain their point of view. Knowing their positions will help you to adapt the routine to their needs.

Subsequently, relating their ideas with the task, suggest that they complete a thinking routine or a metacognitive staircase. The Know

NOTE: It is recommended that the students sit on the floor in a circle, closing their eyes and speaking in a low tone of voice.



NOTE: At the same time as listening to the music, invite the students to repeat the rhythm with claps, clicks, beats ...





Want Learn (KWL) routine is proposed here: what I know (K), what I want (W) and what I have learnt (L).

Encourage the students to express their earlier ideas on the photocopied worksheet, while explaining that in this way after some time has elapsed, they will be able to recall the starting point, which will help them appreciate their progress.

Remember to point out that in addition to concepts, they can also write procedures and attitudes.

After a few minutes, invite the students to share their worksheets. It is important for them to know that there are no wrong answers, that each student will have different proposals, all of which will be equally valid.

Throughout the project, they continue to complete the different parts, for which purpose it is recommendable that the new contributions will be completed without seeing what had already been written, so that the students are not influenced by their previous ideas and interests. The subsequent analysis will show them everything that they have learnt, it being important to highlight their progress, their improvements and the capabilities they have developed.

NOTE: The activity could be done in small groups, nevertheless, it is recommendable that the students complete it individually, because the progress for each individual will be different, which will let you highlight each person's good points, and progress, improving self-esteem and self-concept.

K, W, L (Know, Want, Learn)

Topic

K	W	L
What I know	What I want to know	What I have learnt

Activity 2. Welcome!

When presenting the reading, it is important to create an intriguing atmosphere, awakening curiosity and emotion that entices the students to learn more. You can start with an 'Escape Room' or with a treasure trail that leads the students to the book, the title of which is covered up. In this way, looking only at the drawing on the cover, new titles can be invented and the adventures hidden within it can be imagined from the drawing on the cover.

MAIN EXPERIENCES

- Invent a title for a story.
- Make predictions, giving reasons in written work.
- Communicate and orally share your own ideas with others.

PREPARATION

TIMING

- 15-20 minutes to find the book.
- 2-3 minutes to observe and to reflect on the cover of the book.
- 5 minutes to invent a title and to justify it.
- 5-7 minutes to put in place ideas, opinions, arguments...

MATERIALS

- Book *Scape from Pompeii* (Balit, 2005)) with the title covered up.
- Worksheets to fill in with different options.
- Writing materials.

CONNECTION WITH THE UNITED NATIONS SUSTAINABILITY DEVELOPMENT GOALS

- Propose activities for inquiry and exploration that strengthen the awareness of students and their responsibility for a better planet.
- Play the videos that show the students what the actual situation of the planet is and what the relevance of the SDGs is.

TEACHING PLAN

DEVELOPMENT

The search for the lost book

In the first place, it is important to prepare a scheme of the tests to be completed and their order. A relation between them is recommendable, so that the activity is more dynamic, intuitive and self-controlled. In addition, you can use riddles to work on previous knowledge, to reinforce concepts, and to improve procedures.

With regard to the groups, cooperative work in groups of around four members will be central. It is important to recall the norms of conviviality and classroom norms to maintain an atmosphere that is conducive to learning.

Taking all the above aspects into consideration, it could be proposed that the solution to mathematical operations is the key to open a padlock that will give access to a box in which the disordered parts of a news report is found. Once having ordered it, the students can read the text that will lead them to the following step and so on successively until the book is found.

You must not forget to cover up the title on the book cover, for which purpose you can use a sheet and a piece of adhesive tape.

Discovering the book

Having found the book, invite the students to sit on the ground forming a semi-circle. Arranged in this way, students can see the book cover without difficulty. Keeping the title covered up, propose questions that favor reflection on the story that they will discover later on.

- What is this drawing? Why does it appear on the cover?
- What sort of book could it be? An adventure book? A horror story? A mystery story?
- Where will the story take place? Do more people appear in it?

After giving oral answers to the questions, the students are handed a worksheet on which they must individually invent their own titles

NOTE: The activity can be complemented by drawing an alternative book cover following their proposals.



and justify them, each student setting out an idea of what the story will be.

Subsequently, a few minutes will be given over to sharing their proposals, expressing the different points of view and options. In addition, the written work can be placed on a classroom noticeboard as a way of decorating the classroom

Activity 3. Where is Pompeii?

Knowledge of the geographical location on which the reading book is based will help students to contextualize their learning. For this purpose, Web 2.0 tools can be used to encourage the construction of learning, fostering curiosity, independence, autonomy, collaboration, experimentation and research.

MAIN EXPERIENCES

- 5 minutes to investigate with Google Earth.
- 10 minutes to measure the distance between different cities and places.
- 20 minutes to draw a map.
- 5 minutes to share their answers.

PREPARATION

TIMING

- Digital devices with internet connection.
- Pencil, paints, felt-tip pens, etc.

MATERIALS

- Photocopy of worksheet with the structure that students have to complete.
- Pencils, paints, markers, etc.

NOTE: If you do not have a digital device and/or internet connection, use a globe or printed maps.

CONNECTION WITH THE RESPONSIBLE CITIZEN

- Remind the students of the importance of respecting the norms of conviviality, in the school environment and family and social life.



- Use debates and role plays to present reality-based situations that raise student awareness, in relation to their responsibility for improving their physical and social environment. Ask them to propose actions to solve or to improve those situations.
- Set out visits and programs of shared events with local associations, so that the students collaborate in the search for solutions within their real environment.

TEACHING PLAN

DEVELOPMENT

Discovering Pompeii

Start by talking to the students:

- Have you heard of Pompeii before?
- Do you know where it is on a map? Where is it?

Based on their answers, invite them to search for Pompeii using the Goggle Earth application. To do so, they have to zoom in on the Mediterranean area, more specifically, on the Bay of Naples.

Designing a map

As students approach the area, they will be able to observe its proximity to Mount Vesuvius, which you can use as an opportunity to ask them to measure the distance between the two points. Then, invite them to measure the distances to other cities in the bay, such as Ercolano or Oplonti.

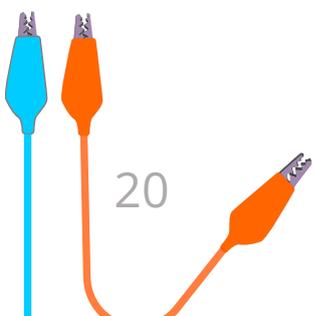
With all the information gathered, ask them, in groups of four or five, to design a map on which they can roughly place all the locations. To achieve a more realistic result, introduce the concept of scale, pointing out its importance in cartographic representation and how it is used.

Finally, invite them to present their creations and explain which places they have decided to include, as well as the scale that was used. The rest of the classmates can measure some distances and check that the relationship of equivalence does in fact exist.

5th EPO student: "I thought it was very cool, because we learn more interesting things and I have also learned about a city I did not know."

NOTE: You can take the opportunity to review the differences between gulf, bay, cape, cape, delta... Ask your students to define them in their own words and to illustrate it with places they know, such as the Bay of Santander or the Gulf of Cadiz.

NOTE: To work the mathematical competence, ask students to convert the distances into different units, such as kilometres, metres and centimetres. They can also compare and order them according to how close or far they are from a point, such as Pompeii or Mount Vesuvius.



Activity 4. Puzzles

Puzzles such as word searches and crossword puzzles encourage attention, concentration and fine motor skills. In addition, they can be used as a playful resource with which to work on linguistic competence, so that students can expand their vocabulary, review previously acquired vocabulary and improve their spelling, among other aspects.

On the other hand, word games provide the opportunity to practice problem solving through logical thinking, decision making and the search for solutions, which also develops creativity.

In addition to these benefits, these are activities when children can disconnect and relax by spending a long period of time sitting down and concentrating on their solutions.

PREPARATION

TIMING

- The duration of each pastime will vary according to the difficulty of the activity.
- 10 minutes to comment on the experience.

MATERIALS

- Pencils, paints, felt-tip pens...
- Photocopies of the puzzles.

CONNECTION TO INCLUSION

- Actively promote respect for student diversity.
- Identify possible (physical, social, cultural) barriers and take them into account when organizing the class.
- Offer the same opportunities to everyone, but move away from uniformity; the methodologies that we propose in this project will help you with this goal.
- Organize the students into heterogeneous groups in which they can develop their own capabilities and experience the possibility of helping their companions to develop both academically and personally.

TEACHING PLAN

DEVELOPMENT

Passing the time

Give each student or groups of four or five students a photocopy of a pastime - you can let them choose from word search, crossword or any of the other options you have available. If the classroom has a flipchart, you can do the activity together, which will center the attention of the students.

If the activity is done cooperatively, you can establish guidelines so that all members of the group can participate, for example, everyone can look up a word and turn the page.

Due to the open-ended nature of the activity, you can use it to review concepts or lexis previously worked on, to introduce new topics or as an ice breaker among other activities.

You can use websites such as <https://www.educima.com/> to create the materials

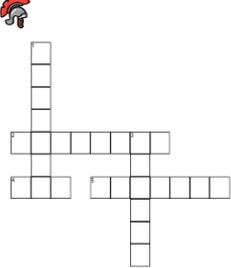
Activity 5. We predict the story

In the process of reading, the realization of predictions constitutes a type of inference in which the reader relates what he reads in the text with his knowledge and previous experiences, trying to anticipate, to predict what will happen next.

This step is fundamental throughout the reading process, contributing to the planning and anticipation of the reading, as well as to the verification, review and control of what is read. On the other hand, it is also essential to motivate and maintain interest in the text, establishing an emotional connection with the book.

MAIN EXPERIENCES

- Predict what is going to happen in the story from the cover of the book.
- Correctly argue opinions and assessments.
- Improve oral expression.



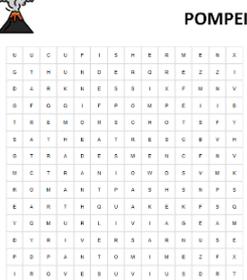
POMPEII

Verticales

1. Jar with two handles on the sides used in ancient times for wine and transport wine.
2. Name that the Greeks gave to the city of Naples, whose meaning is New town.
3. Name of houses typical of Ancient Rome, more humble than single-family houses (domus).

Horizontales

4. Gray mineral dust that is ejected by a volcano during its eruptions.
5. Active volcano located in the Gulf of Naples that in 79 A.D. erupted destroying Pompeii.



POMPEII

U	D	C	U	P	I	S	H	E	R	M	E	N	X	
G	T	H	U	N	D	E	R	Q	R	E	Z	Z	I	
E	A	R	K	N	E	S	S	I	X	F	M	K	V	
E	F	O	G	I	F	P	O	M	P	E	I	I	B	
T	R	E	M	O	R	E	S	C	H	O	T	E	F	Y
E	A	T	H	R	A	T	R	E	B	C	R	E	V	H
G	T	R	A	D	E	S	M	E	N	C	F	R	V	
H	C	T	R	A	N	I	O	W	D	S	V	M	K	
K	O	M	A	N	T	P	A	X	S	N	S	P	X	
E	A	L	T	H	O	U	A	K	E	K	F	I	D	
V	O	M	U	R	L	I	V	I	A	B	E	A	M	
E	Y	K	I	V	E	R	S	A	M	V	S	E	R	
P	E	P	A	N	T	O	M	I	M	E	Z	F	X	
I	X	O	V	E	R	U	V	I	V	E	R	D	T	

Abē	Dolores
Earthquake	Fishermen
Hot	Livia
Pantheon	Pompeii
Rivestinus	Roman
Theraps	Thunder
Tradersmen	Tranio
Terrors	Veuvitis

NOTE: You can ask students to classify the words found once they have completed the activity according to whether they are names of places, natural phenomena or words from another era. It is advisable to assign each category a color with which to underline the concepts and to facilitate the classification.

PREPARATION

TIMING

- 5-7 minutes to brainstorm the concept of prediction.
- 10 minutes to predict history.
- 5 minutes to share the proposals.

MATERIALS

- Cover drawing.
- Pens, paintings, pencils.
- Tab on predictions.

NOTE: It is recommended that you provide students with visual AIDSs, such as posters or posters that help them better understand such an abstract concept. It is also important that they relate their contributions to everyday examples, such as weather forecasts.

CONNECTION WITH GENDER QUESTIONS

- Remember to incentivize student participation and motivation. Use positive language and reinforcement.
- Encourage students to participate during the classes and to assume responsibilities within the dynamics of the classroom.
- Create heterogeneous groupings organizing rotating roles in which the students and their companions have specific responsibilities.
- Include figures with female references in the explanations. Highlight their relevance and their involvement in their work.

TEACHING PLAN

DEVELOPMENT

Brainstorming of predictions

It begins with an invitation to students to brainstorm the concept of prediction. It is important that you ask questions that enhance the reflective thinking of the students and that help them to build a complete concept of prediction.

- What is a prediction? How is it formed?
- What are predictions used for in everyday life? And during the reading?
- When are they made? Why are they important?

WHAT IS A PREDICTION?



A prediction is, according to Duke and Pearson (2002), a riddle, an idea or an estimate of what might happen in the future.

WHY SHOULD READERS MAKE PREDICTIONS?

- ✓ Because they make the reader think about the idea or the main event during the text and monitor their understanding.
- ✓ Because they allow the reader to think before they read.
- ✓ Because they make the reader more engaged and entertained.



MAKE PREDICTIONS

A prediction is a guess that is made with the help of text or images.



"I believe that _____ because _____"



1 Before reading

Watch the title and illustrations



2 During the reading

STOP! Predict what's going to happen



3 After reading

✓ Confirms ✗ Modify your prediction

Predicting the story

Once the concept of prediction has been clarified, invite students to observe the cover of the book and make their own predictions. Invite them to reflect on the different parts of the story:

- The characters, what are they going to be like? How are they going to behave? Where will they live?
- What events are going to take place? How will they affect the characters?
- How are these problems going to be solved? What will be the end of the story?

From the answers to these questions, they can make a scheme in which all the predictions are reflected. In this way, as you advance with the reading of the book, they can be reviewed and modified. In relation to design and organization, you could divide the class into small groups and assign a working topic to each one.

Activity 6. What are the characters like?

After having made predictions about the story, we will move on to another fundamental element, the characters. It is important for students to get to know the main characters, to imagine what they are like and how they feel. This closeness favors empathy and enthusiasm to know more, to advance through the book and to discover what happens to the mermaid, the drop of water, through its journey.

PREPARATION

TIMING

- 3-5 minutes to differentiate between physical features and personality traits.
- 10 minutes to describe the characters of the cover.
- 5 minutes to reflect upon and to go over the results.

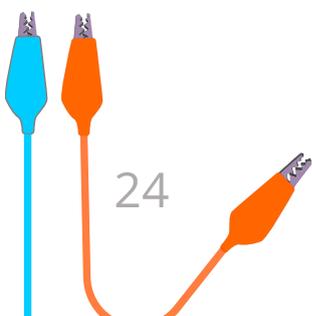
MATERIALS

- Poster of Tranio and Livia (A3 size).
- Post-its.

5nd EPO student: "I really liked predicting the future, it's like having a crystal ball."

NOTE: Remember that it is important that each group explains their proposals orally to the class, focusing on what aspects they have taken into account to make them.

NOTE: This activity can be done either before or after the reading, and can be included in both moments. Before the reading, predictions are made about what the characters will be like, based on the text of the synopsis of the book. After reading, the predictions that do not match the story can be evaluated and modified.



- Pencils, paints, markers, etc.

CONNECTION WITH THE RESPONSIBLE CITIZEN

- Remind the students of the importance of respecting the norms of conviviality, in the school environment and family and social life.
- Use debates and role plays to present reality-based situations that raise student awareness, in relation to their responsibility for improving their physical and social environment. Ask them to propose actions to solve or to improve those situations.
- Set out visits and programs of shared events with local associations, so that the students collaborate in the search for solutions within their real environment.

TEACHING PLAN

DEVELOPMENT

Meeting the characters

Before completing the descriptions, it is important for students to understand the need to include not only physical features, but also features related with personality, the emotions, and the feelings of the person.

In relation with those aspects, you can explain that descriptions of people are different in accordance with the content that is included.

- Personal appearance: physical features.
- Moral profile: character and feelings.
- Portraiture: physical features, character and feelings.

The next step is to invite the students to apply what they have learnt and to draw a portrait of the characters. To do so, pin an A3 size poster of Tranio and Livia noticeboard or the blackboard so that all the details can easily be well appreciated and hand out various post-its to each student. You can in this way use two colors to differentiate the internal and the external features, which will help you to check understanding of both concepts.

NOTE: Preparing a scheme of the principal differences will help to consolidate the concepts, at the same time as providing visual AIDS during the activity.



Each student must write a word on a post-it that describes one of the two characters and that may be accompanied by a drawing. Once it is ready, stick it on or around the poster.

To help them think, you can ask questions such as:

- Are they young or old?
- Is their hair long or short? What color is it?
- Are they happy, are they sad, are they angry?
- Are their clothes new? Are they flashy? What are they wearing?

It is important to try not to repeat words and to involve all students in the exercise, using words within a lexical range that they already know or can enlarge with the help of a dictionary.

When the students have stuck at least one post-it, it is a good idea to read over all the words, once again to emphasize the differences between the physical features and the character descriptions.

On the other hand, the activity can be focused on working each sort of personal description in an isolated way. In this case, the task could be to include or only to read the words of each category.

Activity 7. How does it make me feel?

Music will allow you to work on the theme of the project while at the same time addressing emotional intelligence, as music arouses emotions through variations in tempo, mode or intensity, producing anger, joy, sadness or calm. In this sense, working on emotional intelligence is fundamental for pupils to achieve social and mental wellbeing that helps them to understand their surroundings and to express themselves, taking into account their feelings and those of others.

PREPARATION

TIMING

- Play the full video once with no image.
- 2-3 minutes to reflect individually on the listening.
- 5 minutes to share ideas, opinions, emotions...

5th-year primary-school student: "I liked it a lot, it's a different way of describing things."

4rd-year primary-student: "Using post-its was real fun."

NOTE: it is recommended that students sit on the floor in a circle, closing their eyes and speaking in a low tone of voice when carrying out this activity.

- Play the video again with audio and image.
- 2-3 minutes to comment on the final reflections.

MATERIALS

Everything necessary to project the image and audio of the Etna Volcano video. <https://youtu.be/3OivXallUTE>

CONNECTION WITH DIGITAL WORLD

- Create a blog with restricted access in which there are curiosities on the topics that are worked, proposals for additional activities and reinforcement exercises.
- Use digital platforms such as Padlet to strengthen the debate and the divulgation of ideas and opinions among the students.
- Strengthen the search for information in digital sources. It is fundamental to emphasize the importance of comparing data.
- Work on the positive aspects (sustainability, agility, etc.), but also on the negative aspects of the networks (cyber bullying, digital dependency, identity phishing, etc.) and propose, together with families, simple actions to minimize them.

NOTE: The sound of the eruption of Mount Etna will be used as there are no recordings of the eruption of Mount Vesuvius. Everything you will need to project the video and audio of the Volcano Etna.

<https://youtu.be/3OivXallUTE>

5rd grade student: "I thought it was a very fun and unique activity".

NOTE: To enhance artistic competence, propose to the students to create a representation of the volcano with playdough.



TEACHING PLAN

DEVELOPMENT

Reflecting on sound

Play the video without the image, only with the audio, allowing students to listen carefully. Then invite them to reflect on what they have heard.

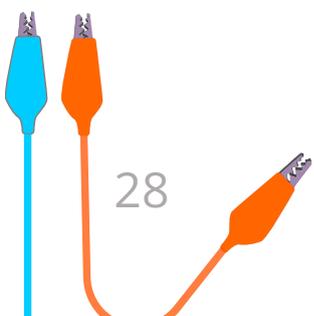
- What can that sound produce, what does it sound like, have you heard it before?
- How do you feel? What does it convey? In what situations do you feel this way?

After sharing the answers and commenting on the students' opinions, the video with image and audio will be played again.

- What do you think now, have you ever seen anything like this before?



- Does your perception of the sound change, and does it still convey the same thing?
- How do you think it was recorded? Do you think all volcanoes sound the same? Play the sound track of the video without the images, letting the students listen carefully. Then invite them to reflect on what they have heard.
 - What causes that sound? What is it like? Have you heard anything like that before?
 - How do you feel? What does it tell you? In what situations do you feel like that?



NOTE: The reading of the book does not have to be done in a single session, but can be divided up to cover various classes. In this way, the related activities can continue to be interspersed with each part of the story (see the After Reading section), which will help the students to understand the links and the contextualization of the different parts better.

In addition, before returning to the reading, a few minutes must be dedicated to asking questions, performing dramatizations or jointly preparing summaries. What was previously read can be reviewed with them, going over the key words and the most relevant events and making deductions about what is going to happen.

2nd-year primary-school student: "The story seemed very funny to me and was a very entertaining way of learning new content".

5th-year primary-school student: "It seemed very funny and amusing. It was a topic that I really liked a lot".

4th-year primary-school student: "The topic seemed like good fun to me, and a way of learning with games and different activities that we were doing with the topic. My opinion is... I liked it".

During the reading

Preparation

During the reading of the book, it is important to create a calm and relaxed atmosphere that lends itself to paying attention, listening and enjoying the story. In addition, it has to be remembered that all the students must be able to see the book, for which reason sitting on the floor in a semi-circle is the ideal arrangement.

With regard to the materials, you must have all those resources that you are going to use within reach, to avoid losing time and above all so as not to distract your students. It is likewise recommendable to have read the book beforehand, so that you are familiar with its content and its learning possibilities.

With this information and taking into account the characteristics of your students, a plan that will guide you during the reading can be drawn up. In this way, you will know which questions to ask, where to place the emphasis and at which times it is necessary to pause and to clarify some concept or event.

Implementation in the classroom

Activity 8. Storytelling

During the reading, remember that it is important that students show their interest, are attentive and participate in the dynamic. Some routines, dynamics and strategies are presented that will help you to achieve it.

PREPARATION

TIMING

- 2-3 minutes to introduce the book, analyzing the cover, describing the lead character ...
- 20 minutes for reading.
- 5 minutes for the final reflection.



MATERIALS

The book *Scape from Pompeii* and those materials you need to perform the dynamics of attention.

CONNECTION WITH EVALUATION

- Remember to use evaluative methods and instruments that are in accordance with the proposal for the development of competences and the active and collaborative methodologies that have been proposed. These frameworks will strengthen self-evaluation and involve the students in the evaluation process.
- It is important to carry out an initial evaluation, another one during the activities and a final one to perceive the progress of the students.

TEACHING PLAN

DEVELOPMENT

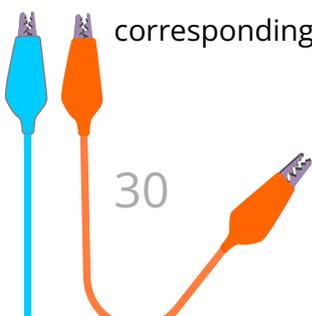
You can return once again to the cover of the book, in order to present the book, reviewing the title and the author on the cover. You can also ask the students for a brief description of the main characters, recalling physical and psychological aspects.

Once you start reading, you must bear in mind various points. In the first place, try to show the book at all times, so that the students observe the illustrations, which will help to understand the oral text.

With regard to oral expression, you have to lend attention to pronunciation and modulation of the voice. It is important to stress and to emphasize those words and expressions that are the most important for the story and for subsequent activities. You can, once again, resort to gestures and facial expressions.

On the other hand, it is important to ask questions throughout the reading. You can bring students to reflect on what is going to happen afterwards. They will, in this way, make hypotheses and predictions, practicing syntactic structures and grammar in the corresponding foreign language.

NOTE: You can partially change the text of the book, using simpler structures and include concepts and key words related with the topic, which appear at other points in the original story.



Likewise, with the objective of dynamizing the reading and making it more participative, invite the students to make gestures, complete phrases or expressions that regularly crop up throughout the reading and that they might know ...

In addition, you can include dynamics to consolidate key vocabulary and to encourage active listening among the students. For example, using cards in which words and images relate a concept. One can be handed out to each student, who every time the same word is heard, has to stand up. In this activity, it is recommendable to set a word so that all the students stand up when it is said, achieving a feeling of unity and group cohesion.

4th YEAR student: "It has been very interesting since it is very fun to read this story and what I liked the most were the illustrations."

NOTE: You can glue the cards to wooden lollipop sticks to facilitate their use. Try to make the drawings visual and simple. Repeat the words a lot to ensure they are reinforced.

Finally, having finished the reading it is important to stimulate reflection, take time to go over the most important moments and to emphasize those situations that will be basis of the following activities. Do not forget to propose questions on whether they liked or did not like the reading, which has been your favorite part or whether they would recommend the book to their friends.



After reading

Preparation

The reading of the book will include various activities with which to work numerous concepts, contents and procedures from different disciplines.

Establishing relations between the story in the book and what was worked in each activity or exercise is important. Doing so will make it much easier for the students to connect and to interrelate what is learnt, at the same time as giving them an important role when reading.

In the same way as with the episodes previously pointed out, you must create a relaxed, participative environment that motivates and interests the students. In addition, as you already know, it is recommendable that you have all the materials and the resources within reach that you will need for each situation. Likewise, drawing up a plan will help you to reach all your objectives and to use the available time to the utmost.

NOTE: Leaving the book in the reading corner, the students can go over to it whenever they may need to read it.

Implementation in the classroom

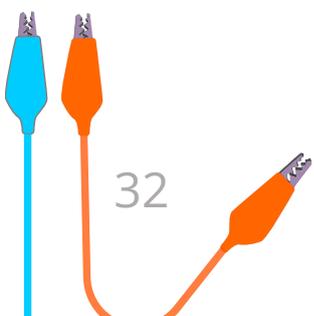
Activity 9. Journey to the interior of the story

All stories have some parts that characterize them. Inquiring into the characters, the scenography and the succession of events can be a way of reviewing what has been read, confirming whether the story has been understood and at the same time, establishing a generic foundation that will help the students to create their own stories with coherence and correction. It is important that the whole process is guided with questions that favor reflection with reasoned proposal.

PREPARATION

TIMING

- 8-10 minutes to introduce the components of the story and to talk about them.



4rd-year primary-school student: "I liked the topic a lot, although it lasted quite a long time and it was, at first, more difficult than other projects. It was very funny and the activities were very good for learning what the stories were like".

- 15 minutes to complete a mental map.
- 5 minutes to reflect on the activity.

MATERIALS

- Photocopies with schemes of the mental map to be completed.
- Pencils, pens, paints, etc.
- And if possible: digital device with an internet connection.

CONNECTION WITH FAMILIES

- Send regular newsletters to the families detailing student progress and learning.
- Encourage family members to reinforce the activities within the classroom at home, which can stimulate curiosity and exploration.
- Prepare a folder with activities and proposals to work on at weekends.

TEACHING PLAN

DEVELOPMENT

The structure of a story

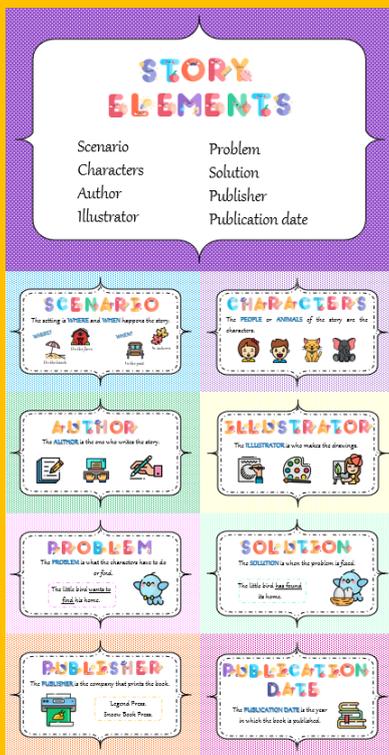
The Pencils-in-the-center technique can be used to approach the structure of the story, in this way, split into groups of 4 to 5 students, the students talk for a few minutes about what they consider are the shared aspects of all the stories. Once that time has elapsed, each individual member will write a proposal. Subsequently, they all share their material in the group and they reach a consensus.

The mental map

After getting to know the principal elements, you can suggest that the students complete a mental map, in other words, a scheme in which all the characteristics will be included, relating them with the book that has been read.

You can ask questions to help them in the process such as:

NOTE: You can use visual aids to help the students to recall all the elements and their characteristics.





- What is the beginning of the story? What is the outcome? And the end?
- Who is the leading character? And the secondary characters? What do like about them? Who is your favorite character? Why?
- Where does the story take place?
- Is there any problem in the story? If so, how is it resolved?
- What do you think of the end? Do you like it? Would you change anything? What?
- Is there a relation between the beginning and the end?

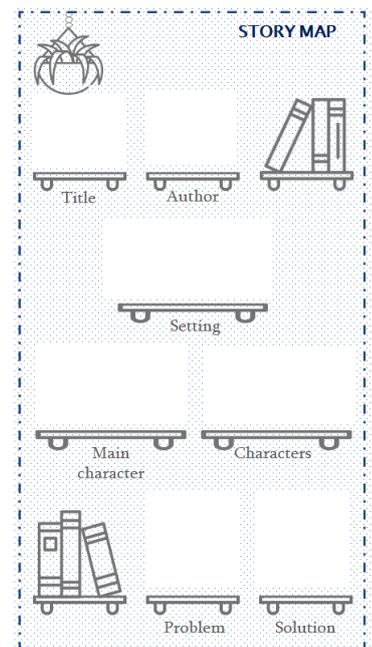
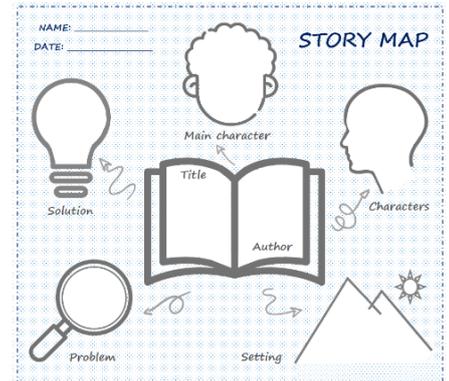
Each student can complete a mental map or, if preferred, can draw it in small groups. A guided proposal of a mental map is shown here in which the students only have to complete specific information from the book, nevertheless, you can invite them to draw the template as well, thereby strengthening creativity and independence.

On the other hand, if you have digital devices, you can use the Mindomo application, thereby working on digital skills.

Talking about and discussing the maps are recommendable to draw the activity to a close, incentivizing reasoning and presentation. It is important that the students are shown the importance of summarizing and organizing the information in a visual and piece-by-piece approach. This process will help to summarize the topic under study and in general to understand the texts better.

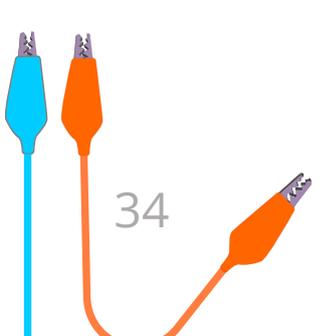
Activity 10. The disordered story

In the same way as it was important to know each part of the story, the students also have to be capable of sequencing the events and acts that take place in them. This organization will help you once again to go over the text that was read and to improve student understanding at the same time as reinforcing the concepts and ideas related with the story.



3rd EPO student: "I really liked the subject, although it was a bit long and in principle, more difficult than other projects. It was a lot of fun and the activities were very good for learning what the stories are like."

NOTE: The activity can be done both in an individual manner and in small-sized groups. In addition, it can be developed during the reading or as a method of correction.



PREPARATION

TIMING

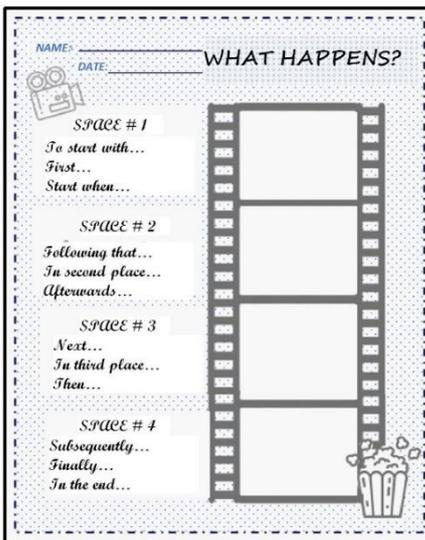
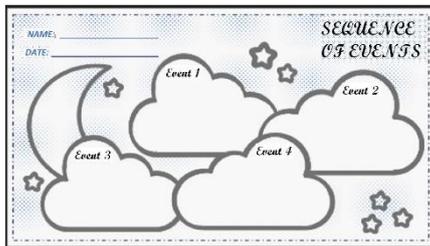
- 15 minutes to write out and complete the photocopied worksheets.
- 5 minutes to share the proposals.

MATERIALS

- Reading book.
- Pictures of parts of the story.
- Photocopies to complete the sequence of events.
- Pencils, pens, paints.

CONNECTION WITH THE UNITED NATIONS SUSTAINABILITY DEVELOPMENT GOALS

- Propose activities for inquiry and exploration that strengthen the awareness of students and their responsibility for a better planet.
- Play the videos that show the students what the actual situation of the planet is and what the relevance of the SDGs is.



TEACHING PLAN

DEVELOPMENT

Ordering the story

It is recommendable for the students to try to follow the temporal sequence, which will facilitate recording all the information without forgetting any aspect of importance.

You can hand images with scenes from the story. Let them put them in order for a few minutes, indicating the order of the events..

You can invite the students to design their own chronological line of the facts of use templates such as those that are shown here to guide them through the process.

On the other hand , it is important to reinforce the key vocabulary of the story while students are ordering the events.

Activity 11. Fact or fiction

Including the world of fiction in the reality of the classroom is important for stimulating the imagination and learning to distinguish what is real from what is not real. The mental process behind such differentiation helps the development of higher cognitive functions that play a fundamental role in critical and reflective thinking, as well as for observing, analyzing and contrasting reality.

PREPARATION

TIMING

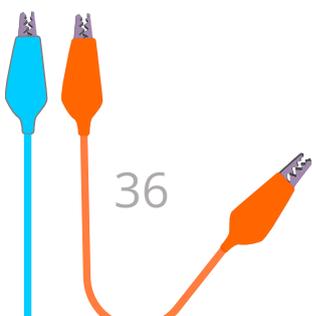
- 5 minutes to remember the story of the book.
- 15 minutes to complete the table.
- 10 minutes to guess the propositions of the classmates.
- 5 minutes to comment on the experience.

MATERIALS

- Reading book.
- Photocopies to complete the table.
- Pencil, pens, paints.

CONNECTION WITH RESPONSIBLE CITIZEN

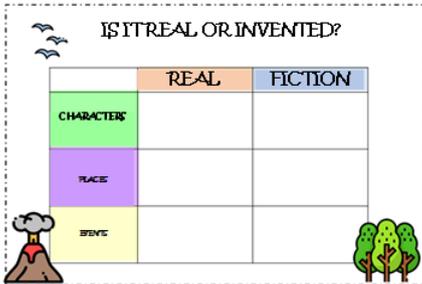
- Remind the students of the importance of respecting the norms of conviviality, in the school environment and family and social life.
- Use debates and role plays to present reality-based situations that raise student awareness, in relation to their responsibility for improving their physical and social environment. Ask them to propose actions to solve or to improve those situations.
- Set out visits and programs of shared events with local associations, so that the students collaborate in the search for solutions within their real environment.



TEACHING PLAN

DEVELOPMENT

Analyzing the story



IS IT REAL OR INVENTED?		REAL	FICTION
CHARACTERS			
PLACE			
EVENTS			

Taking the reading book as a starting point, invite students to recall the reading, paying attention to the characters that appear in it, the places mentioned and the main events that take place.

Then, divide the students into groups of four or five and invite them to complete the table, organizing all the facts they can recall according to whether they think they are real facts or whether they think the authors invented them.

Once they have completed the table, allow them to share their proposals with the rest of the groups and reach a consensus on the information provided.

Real or invented?

Once the story has been analyzed, ask the students to work individually to come up with two short stories lasting approximately half a minute. One of them should be made up, while the other should relate something real that has happened.

Respecting turns of speech and in a random way, each student will read aloud his/her two proposals and the other classmates will have to try to guess which one is which.

It is important to remind them to pay attention to the way the voice is modulated, facial expressions, gestures, intensity... all these aspects can give them clues as to whether the story is real or fictitious

Activity 12. Pros and cons

The analysis of reality and decision-making are two fundamental skills in the development process of students. These skills are related to critical thinking, reflection and data analysis, which are essential processes for carrying out most school-related, personal, family and social tasks.



PREPARATION

TIMING

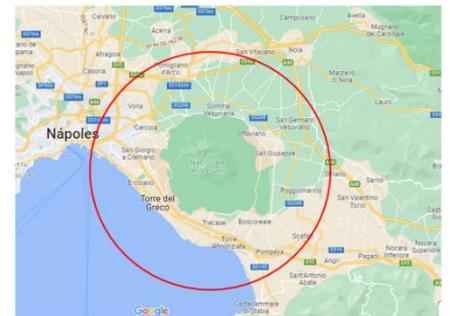
- 5 minutes to recall the plot of the book.
- 5 minutes to talk about the impact of the eruption.
- 10 minutes to complete the list of pros and cons.
- 5 minutes to discuss the experience.

MATERIALS

- Reading book.
- Map.
- Photocopies to complete the list.
- Pencil, pens, paints.

CONNECTION WITH INCLUSION

- Actively promote respect for student diversity.
- Identify possible (physical, social, cultural) barriers and take them into account when organizing the class.
- Offer the same opportunities to everyone, but move away from uniformity; the methodologies that we propose in this project will help you with this goal.
- Organize the students into heterogeneous groups in which they can develop their own capabilities and experience the possibility of helping their companions to develop both academically and personally.



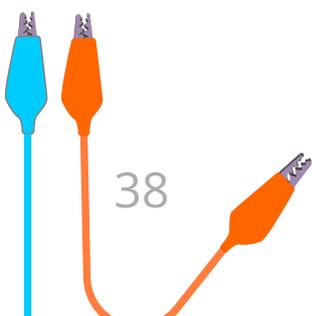
TEACHING PLAN

DEVELOPMENT

Returning to the story in the book, invite students to recall the moment when Tranio and Livia were fleeing Pompeii in the fishing boat.

- How far do you think the pyroclasts came? And the rain of ash?
- How long would it take for the plume of smoke to disappear?
- What do you think happened in other towns near Vesuvius? How far away would the inhabitants be safe?

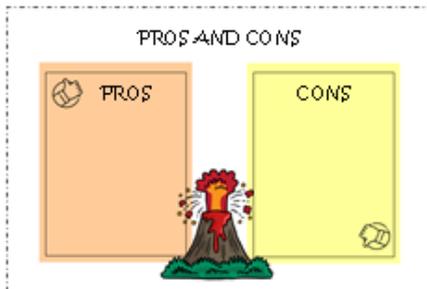
5th EPO student: "I thought it was a very good way to learn and very different from what we usually do. I would like to continue learning in this way."



Based on their answers, ask them to draw the radius of the places affected by the eruption on the map. They can make a list of all the municipalities, putting first those that may have suffered the most severe consequences.

Is this a good idea or not?

Then, considering the drawing of the map and the consequences that the inhabitants of the nearest towns may have suffered, ask the students to write down the pros and cons of living near a volcano.



- What are the economic advantages, what are the health advantages, what are the advantages for growing food?
- Would you like to live near a volcano? Why? Which one?

Activity 13. An acrostic poem

Reading and writing are two processes that contribute to improving comprehension, reflection and concentration, while favoring the development of thought and language. Specifically, writing helps students to focus attention on information, so that the brain can better evaluate the data, organizing the information and constructing new ideas and concepts that will facilitate their recall.

PREPARATION

TIMING

- 20 minutes to write a poem and to decorate it.
- 15 minutes to share their proposals.
- 5 minutes to comment on the experience.

MATERIALS

- Reading book.
- Poster with visual aids on the sorts of poems worked on.
- Pencil, pens, paints.

CONNECTION WITH GENDER QUESTIONS

- Remember to incentivize student participation and motivation. Use positive language and reinforcement.

- Encourage students to participate during the classes and to assume responsibilities within the dynamics of the classroom.
- Create heterogeneous groupings organizing rotating roles in which the students and their companions have specific responsibilities.
- Include figures with female references in the explanations. Highlight their relevance and their involvement in their work.

TEACHING PLAN

DEVELOPMENT

We become poets and poetesses

Taking as a starting point the scene in the book in which Tranio and Livia run through the streets of Pompeii and pass by the Roman theatre where there are still remains of the last theatrical performance, students will be invited to reflect on what kind of texts the Romans would recite.

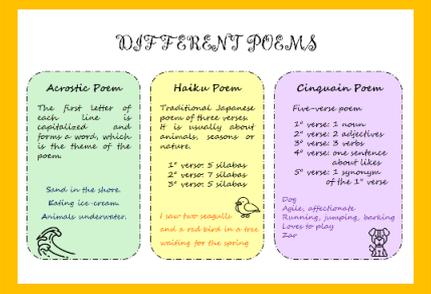
- Would they tell real or invented stories, what would they be about, who would be the main characters?
- Would they be very long stories, would they only perform plays or other texts as well? Like what?

Allow students to talk for a few minutes and discuss the possibilities of Roman life. Then point out that indeed, poetry and songs were also recited in addition to plays such as comedies and tragedies.

In this context, ask the students to write a poem with a theme related to the reading. Moreover, this will not be an ordinary poem, but they will be able to choose between three slightly different types: the Acrostic poem, the Haiku poem and the Cinquain poem.

Once all students have their poems ready, invite them to recite each one. It is very important to remind them to read in a calm voice, at a steady pace, but not too fast, pronouncing all the words carefully and paying attention to voice modulation, gestures and facial expressions.

NOTE: To explain the characteristics and conditions of these poems, you can show them a poster such as the one proposed here.



We analyze our plastic environment

Once they are clear about the characteristics, invite the students to look around and create a table like the one proposed here in which they include at least one example of each type, filling in the data indicated, such as plastic properties, use and recycling. To complete the activity you can ask him to cut the labels with the numbers and paste them on the photocopy.

Activity 14. Let's sing!

In the same way as the rhythms of body percussion, the songs will make the teaching activity dynamic and fluid. In doing so, not only is the rhythmic part worked, but oral expression is also worked, improving intonation, pronunciation, rhythm... as well as bodily expression, completing controlled movements and facial expressions in accordance with the message that you wish to transmit.

Working these aspects at the same time as going over the content that was previously approached will be very beneficial to improve the oral expression of the students while the concepts are consolidated.

PREPARATION

TIMING

- Reproduction of the video as many times as wished.

MATERIALS

- Audiovisual device for playing back and listening to the video of the song.

CONNECTION WITH THE RESPONSIBLE CITIZEN

- Remind the students of the importance of respecting the norms of conviviality, in the school environment and family and social life.
- Use debates and role plays to present reality-based situations that raise student awareness, in relation to their responsibility for improving their physical and social

NOTE: The activity can be used as an ice breaker in the routine at different times. The more times they listen to the song, the more they will be familiar with it and, probably, the more they will participate.

5nd-year primary-school student: "I really liked it a lot, we have learnt the vocabulary that we never knew before".



environment. Ask them to propose actions to solve or to improve those situations.

- Set out visits and programs of shared events with local associations, so that the students collaborate in the search for solutions within their real environment.

TEACHING PLAN

DEVELOPMENT

Invite the students to get up from their chairs and randomly stand around the classroom.

Once all the students have found a place, play the video that you can find at the following link <https://www.youtube.com/watch?v=rncbP5Uk4gU>. During the singing, invite the students to participate, singing those parts that it is important that you also intervene, singing and dancing. Remember that you move around the classroom and that they must not imitate you, everyone has their own style and can freely move around provided they show respect and education.

Activity 15. Experimenting with rocks

In this activity, the students are introduced to the scientific world through the story. It is important to follow the steps that the scientists use, at least approximately, and to repeat the same structure in all the experiments. In this way, the students will know beforehand how they should organize themselves and will become familiar with operational scientific procedures.

PREPARATION

TIMING

- 5 minutes to introduce the scientific method and its phases.
- 5 minutes to consider observing and analyzing what happens in the book and to come up with the research hypothesis.
- 15 minutes to observe and to analyze the rocks.
- 15 minutes to work with the Mohs scale.
- 10 minutes to present the process carried out and discuss what happened.



MATERIALES

- Samples of different rocks (sedimentary, metamorphic and igneous).
- Magnifying glass.
- Pencils, paints, paper.

CONNECTION WITH DIGITAL WORLD

- Create a blog with restricted access in which there are curiosities on the topics that are worked, proposals for additional activities and reinforcement exercises.
- Use digital platforms such as Padlet to strengthen the debate and the divulgation of ideas and opinions among the students.
- Strengthen the search for information in digital sources. It is fundamental to emphasize the importance of comparing data.
- Work on the positive aspects (sustainability, agility, etc.), but also on the negative aspects of the networks (cyber bullying, digital dependency, identity phishing, etc.) and propose, together with families, simple actions to minimize them.

TEACHING PLAN

DEVELOPMENT

Inquiry into sciences



You can explain to the students when introducing the experimentation that they are in fact going to perform experiments, but to do so they have to follow the steps that scientists follow. You can raise questions that lead them to think about this process and to deduce in a collaborative manner the different phases of the scientific method.

- Think of a laboratory. What is the first thing a scientist does? And then?
- Once the scientist has the experimental results, what happens?

Once all the phases have been mentioned, repeat them in the corresponding order. You can make quick repetition games to finish strengthening these concepts. You can also use songs or visual schemes.

Analyzing rocks

As mentioned, it is important to begin with the reading book, so let's return to time at which Mount Vesuvius entered into eruption.

- What types of rocks does the volcano eject? What do they look like?
- Are there more types of rocks in the world, what are their characteristics, how are they similar, how do they differ?

The answers to these questions will help students to define a research question: What are the different types of rocks like?

In relation to these questions, different variables can be studied, such as color, texture, shape, smell...

Next, divide the students into groups of four or five members, with whom they will work cooperatively. We recommend that you assign rock samples from the three groups (sedimentary, metamorphic and igneous) to each group, in order to address all the experimental possibilities, so that they can see the differences and similarities more clearly.

Students should formulate their research hypotheses taking into account these variables: igneous rocks are rougher than sedimentary rocks.

Once the research question and hypothesis have been established, it is time to start experimenting. To do this, give each group all the materials they will need and allow them to design their experiment.

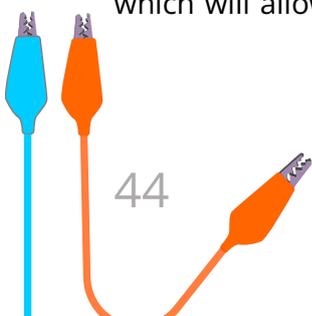
- What are you going to do, do you have a plan of action?
- What do you need? Do you have all the materials and utensils?

Each group will observe, manipulate and analyze the rocks they have been given, completing a table with the information gathered, which will allow them to establish the similarities and differences

5rd-year primary-school student:
"The topic was very interesting. The form of working was very amusing and educational".

6nd year primary school student: "I enjoyed experimenting, the sciences are easier like that and more fun".

NOTE: The conditional will be used for the wording, which is often quite complex, so you can keep the structure fixed and fill in the remaining words with pictograms indicating the different concepts, such as rough, smooth, big, small...



NOTE: The table to be completed by the students should be opened to encourage systematic observation, reflection, and autonomy.

NAME	ORIGIN	TYPE OF ROCK	SPECIAL PROPERTIES (COLOR, WEIGHT, etc.)	TESTS TO DO	RESULTS	MODEL

NAME	Instruments used to scratch the rock				Mohs Scale of hardness
	Fingernail	Coin	Nail	Steel Blade	

NOTE: During the experimentation it is important to ask questions and give simple, concrete and sequenced instructions. This will make it easier for students to follow the process correctly.



between the types of rocks. As well as including descriptive words and phrases, they can draw pictures, illustrating the shape and color of the samples. In addition, ask them to give each rock a fantastic name with which they can distinguish and name it later.

After completing the table, invite students to summarize what they have observed and share their findings with their classmates.

- What are sedimentary rocks like, what are metamorphic rocks like, what are igneous rocks like?
- How are the three groups similar and how do they differ?
- Are they all equally hard? How do you think hardness can be measured?
- How hard are the rocks?

On the basis of the answers given by the students to the last questions, and specifically the last question, explain that, although it may seem and feel like it, not all rocks are equally hard. To measure the degree of hardness of rocks and minerals, scientists can use a numbered scale, the Mohs Scale.

Show them a graph showing diamond as the hardest mineral with a score of 10, which can scratch all other minerals, while the lowest hardness (1) is for talc, which can be scratched by all other minerals.

Taking into account this scale and the meaning of the numbering, invite students to create comparative sentences with the degree of hardness of the rocks that have been previously analyzed.

To do so, let them scratch each rock with different objects (such as a fingernails, coins, nails and steel blades). In a table like the one proposed here, they will write an x if the rock is unchanged and a tick if it is scratched, and then establish the numbers of the Mohs scale.

Once they have completed the table, they will share their notes with their classmates, establishing a group consensus that will be corrected in search of the true Mohs scale.

Finally, they will classify all the rocks they have worked on (naming them with the imaginative name assigned to them) in groups, writing down the characteristics common to each group. You can

invite students to create a poster with the Canva application or a presentation with Prezi to communicate their results.

How do rocks form?

As a complement to the previous experimentation, you can invite students to reflect on the process of rock formation and recreate it in the classroom.

Materials

- 2 cups of brown sugar.
- 2 ounces of baking chocolate.
- 1 pinch of salt.
- 1 teaspoon vanilla.
- 1 handful of walnuts.

Procedure

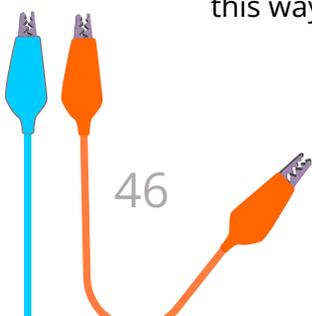
1. Place the sugar, chocolate and salt in a hot pan. Keep it boiling for exactly 3 minutes, stirring constantly.
2. Remove from the heat, add the vanilla and the walnuts, and stir the mixture. Pour the mixture back into the pan and stir until it forms a caramel.
3. Layer the mixture in a transparent bowl to simulate the layers of sedimentary rocks.
4. Then apply heat and pressure to simulate the formation of metamorphic rocks, if cooled at that point.
5. Once everything is well mixed, simulate the eruption of a volcano, cool it down and simulate the formation of igneous rock.

Once the process has been completed, ask students questions that help them to reflect on the process:

- Could the process carried out be similar to the process that forms rocks?
- How are the ingredients mixed? What is necessary for melting and mixing in a substance?
- When the ingredients are not quite melted, are there streaks in the chocolate? What rocks seem to be formed in this way?

4th-year primary-school student: "It seems to me to be a very dynamic fun project where the work is amusing and we learn English much better".

5th-year primary-school student: "I really liked it, because it is a different way of learning English and we played a lot of games".



- In what other ways can rocks be made?

Activity 16. Fracturing the story

Imagination and creativity have to form part of the student development process. Progress in these skills will strengthen the capabilities of the students, preparing them to confront and to resolve day-to-day problems more easily. In this sense, one proposal is that students change (fracture) the story, which will simultaneously let them go over the concepts that have previously been covered.

PREPARATION

TIMING

- 5 minutes to explain the different possibilities.
- 10 minutes to introduce the modifications.
- 5-7 minutes to share the proposals together.
- 25 minutes to invent your own story.
- 5-7 minutes to share the proposed stories together.

MATERIALS

Photocopied worksheets with the mock-up of the comic or minibook.

Pencils, pens, paints.

CONNECTION WITH EVALUATION

- Remember to use evaluative methods and instruments that are in accordance with the proposal for the development of competences and the active and collaborative methodologies that have been proposed. These frameworks will strengthen self-evaluation and involve the students in the evaluation process.
- It is important to carry out an initial evaluation, another one during the activities and a final one to perceive the progress of the students.

TEACHING PLAN

DEVELOPMENT

Dividing up the story

Explain to the students the possible ways of fracturing a story. To do so, you can use the different parts of the story, reviewing the concepts previously worked upon and introducing them as new content.

In this way, the students may select one or various elements to be modified, such as the characters, the scenery, the problem, the argument, the end, or the approach. During this process of creation, try to give very general guidelines that do not condition the development of their creativity and imagination.

It is important to remind the students that there are no incorrect responses, that all the modifications are valid provided that they follow the rules on orthography and internal cohesion.

Once all the students have prepared their stories, they can be shared in the reading area of the classroom.

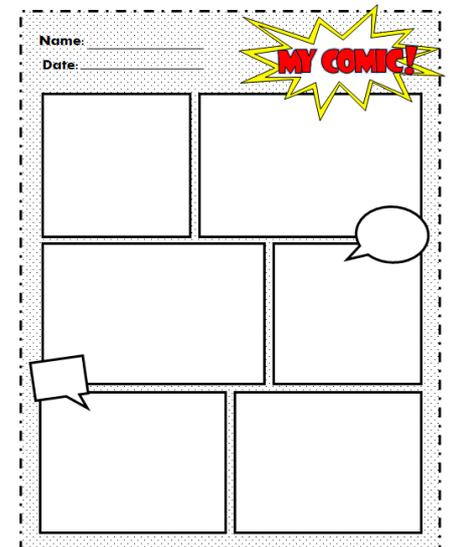
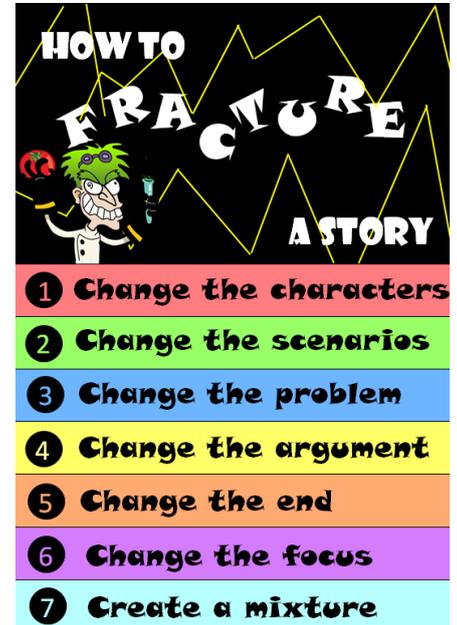
Creating a comic or minibook

Subsequently, based on the contributions of the students, invite them to reflect on other eruptions, such as that of the Kilauea volcano.

With this idea, invite them to create a comic, using this template or another one of their own, in which the main character could be an inhabitant of Hawaii.

Another option, will be to create a minibook in which the design of the text will be similar to the comic when divided into comic strips, helping the students to structure their story and reflect it through drawings and illustrations.

In both cases, it is important to give a few minutes to sharing the proposals, highlighting the positive aspects and pointing to improvements.



4th EPO student: "This project has been a lot of fun, we learned a lot of things, I really liked the theme of the book and the activities carried out."

Actividad 17. Roman researchers

The search for information is an educational strategy that contributes to the development of skills such as summarization skills, lexical expansion and the development of written expression. On the other hand, critical thinking is encouraged, improving the ability to select and to contrast useful information.

PREPARATION

TIMING

- 5 minutes to remember the story of the book.
- 15 minutes to look for information and complete the worksheet.
- 5 minutes to share the results.

MATERIALS

- Photocopy with the data to be filled in.
- Pencils, paints, felt-tip pens...
- Internet connection and digital devices to search for information.

CONNECTION WITH FAMILIES

- Send regular newsletters to the families detailing student progress and learning.
- Encourage family members to reinforce the activities within the classroom at home, which can stimulate curiosity and exploration.
- Prepare a folder with activities and proposals to work on at weekends.

TEACHING PLAN

DEVELOPMENT

The Roman roads

In the story book, go back to the moment when Tranio and Livia were running through the streets of Pompeii to get to the little boy's house.

- Do you know what the name of this type of road is?

NOTE: If you do not have an Internet connection, you can provide students with a variety of information on the subject in paper format. It is recommended that you include all kinds of data and variations in them so that students can select the data they need.



- What materials are used to make these sorts of roads? How were they built? How long did it take?
- Are there still any roads left today? Are they still in use?
- What do you think of them, do you like them, why?

After allowing students to talk for a few minutes, invite them to fill in a sheet with more information on the use, construction methods, materials used in Roman times. The activity can be done individually or as a cooperative task with working groups of four or five.

Once all students or groups have all the required data, spend a few minutes sharing the proposals and allow students to complete the information.

- What do you think now, do you think it was very difficult to build roads like this?
- Do you think that a lot of progress has been made in the way roads are built? Why?

Activity 18. Let's travel!

Knowing the geographical and spatial location of the environment is fundamental to contextualize student learning. In this sense, it is important to situate the students on the map, to help them reflect on the connection of places and forms of transport during the historical era that is under study.

Knowing the geographical layout will enhance the development of spatial vision, orientation and the learning of the cardinal points. It will also allow you to include the evolution of means of transport and the importance of trade routes.

PREPARATION

TIMING

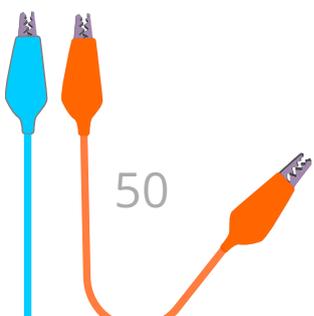
- 5 minutes to recall the plot of the book and reflect on the theme.
- 15 minutes to design a travel route.
- 5 minutes to share the proposals.

NOTE: You can invite students to create with plasticine and recycled materials a representation of the streets of Pompeii. To create a design they can analyze different images and read descriptive texts.

Student of 6th EPO: "Thanks to this project we have been able to better understand what happened. Using plasticine and the other crafts is a fun way to learn."

Student of 4th EPO: "What I liked the most was to make the Roman street".

4th EPO student: "I liked the activity because it explains the problem of plastic, for people who are bored so they won't be so bored."



MATERIALS

- Map showing the main Roman cities and roads of the period. You can find it at the following link https://www.geografiainfinita.com/wp-content/uploads/2017/06/Rome_III-01-1.png
- Pencils, paints, felt-tip pens...
- Photocopy to be completed with the designed route.

CONNECTION WITH THE UNITED NATIONS SUSTAINABILITY DEVELOPMENT GOALS

- Propose activities for inquiry and exploration that strengthen the awareness of students and their responsibility for a better planet.
- Play the videos that show the students what the actual situation of the planet is and what the relevance of the SDGs is.

TEACHING PLAN

DEVELOPMENT

On a journey through Ancient Rome

From the story of the book, go back to the moment when Tranio and Livia run relentlessly along the Via Stabiana.

- Was the Via Stabiana a road? What was it like?
- Do you know of any other Roman cities where there might have been roads?
- Do you know where Hispania and Emerita Augusta were?

Based on the students' answers, invite them to reflect on how the inhabitants of the time could move between these cities.

- Were roads only inside the cities or also outside them? How did they travel from one city to another?
- What means of land transport would have been most common, and what means of water transport would have been most common?

Next, ask students to design a route in groups of four or five to travel from Neapolis (in Italy) to Emerita Augusta (in Hispania,



NOTE: You can mention the expression "All roads lead to Rome" and ask students to explain this popular saying.

present-day Spain). To do this, they should look at the map of Roman roads and point out the cities they would pass through, including at least three cities in Hispania.

Once all the groups have designed their route, invite them to share it with the rest of the class and check that it is possible to reach the desired destination.

- What do you think of the Roman road system and do you like it?
- How long do you think it took to travel from one city to another? Does it seem like a long way?
- Would you like to live in a Roman city? Which one? Why?

Activity 19. Engineering power

In this activity, you will introduce the students to engineering design, a didactic method that brings the prototype design process to the classroom.

It is important to follow all the steps that have been established, connecting the learning and reflecting on the process that has been completed.

Remember that it is essential that they use their hands and offer your students the possibility of experimenting, making mistakes, and learning for themselves. Ask them questions and make them reflect on each phase of the process.

PREPARATION

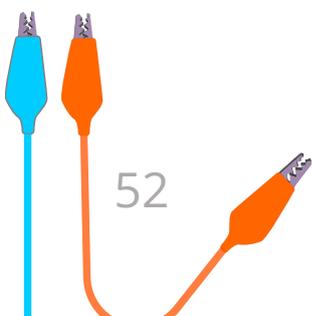
TIMING

- 5-7 minutes to introduce the engineering design method.
- 5-7 minutes to raise the problem and the design to be made.
- 20 minutes to build different catapults.
- 15 minutes to make the launches and to analyze the results.
- 5 minutes to present the process and to discuss what happened.

NOTE: To delve a little deeper into Roman life, ask your students about the meaning of the name of the street in the book: Via Stabiana.

- What language is it and what do you think it means?
- Are English and Latin similar? Can you give an example?

From their answers, invite them to decipher the meaning of various Latin words, trying to find the changes that have taken place over time. Some examples of Latin words are: aqua, tabernae, patronus, mare, and corpus.



MATERIALS

- Wooden sticks (you can use ice-cream sticks).
- Rubber bands of different sizes and thicknesses.
- Plastic spoons of different sizes.
- Projectiles: plastic caps, erasers, etc.

CONNECTION WITH THE RESPONSIBLE CITIZEN

- Remind the students of the importance of respecting the norms of conviviality, in the school environment and family and social life.
- Use debates and role plays to present reality-based situations that raise student awareness, in relation to their responsibility for improving their physical and social environment. Ask them to propose actions to solve or to improve those situations.
- Set out visits and programs of shared events with local associations, so that the students collaborate in the search for solutions within their real environment.

TEACHING PLAN

DEVELOPMENT

The design of engineering

Explain to the students that they are going to design a prototype, but to do so they have to follow the engineering design steps. You can ask them questions that will help them to think about that process and in collaboration work out the different phases of the scientific method.

- When someone wishes to construct or to create something, what is the first step? And afterwards?
- Once an initial design has been constructed, what does the person do?

Once all the phases have been mentioned, repeat them in the corresponding order. You can complete rapid repetition games to complete the consolidation of those concepts. Likewise, you can use songs or visual schemes.



NOTE: You can discuss with students whether they consider Romans as engineers. It is easy for students to think that professional engineering skills were not used in the past.

Experimenting

Starting from Roman culture, ask your students if they have ever seen a catapult.

- What were they used for? How did they work?
- Would it be possible to make a catapult? How, and what would you need?

The answers to these questions will help students to define a research problem: What would the best catapult look like?

Then, divide the class into groups of four or five members who will work together cooperatively and summarize the phases of engineering design, so that students know that it is necessary to imagine, plan, and design the product you want to achieve. They will need to take into account the ingredients and utensils they are going to use, as well as the procedure they need to follow.

Invite students to brainstorm ideas about what the key parts of a design. It is important that you share your preferences and opinions on the matter.

Once a plan is established, it is time to start experimenting. Deliver all the materials to each group that they will need according to the type of plastic the group is going to use, as well as a disordered sequence of images of the phases of the process, which must be ordered following the ordinal numbers that appear on them.

Allow each group to experiment freely and make their designs based on their initial ideas. Remind them that there are a multitude of options and that it is interesting for them to try several versions, modifying the elements to find what best fits their design. You can show them how to join the elements together with the rubber bands so that they can easily alter their organization.

It is important that all groups have rubber bands of different sizes and thicknesses, as well as larger and smaller plastic spoons

Once the catapults have been built, ask each group to test them. They should always use the same projectile and repeat the launches at least four times to record the most reliable results.



6 th EPO student: "It's been a lot of fun, I've loved building a catapult and trying to shoot things."

5 th EPO student: "I liked it a lot, I found it very funny, I have learned many things that I did not know".

After several launches, students can analyze the data and partially alter their designs to try to improve their performance.

After completing the experiment, invite students to evaluate the different catapults, which is a fundamental process of engineering design. To help them visualize more easily the differences and properties of each of the options, they can organize the information in a table.

Finally, they should summarize what has happened and explain to their classmates the process they have followed and the result they have obtained.

- Why did you choose that spoon and that way of placing the elements? How did you achieve it? What kind of rubber bands did you use?
- Which option do you think is the most efficient and why?
- Were there any disagreements? How did you reach a consensus?
- How could you improve your design?

Activity 20. Let's organize a trip

NOTE: If you do not have digital devices or an internet connection, you can show the students images of the different places. Try to provide them with images with details and different angles so that they can develop a complete mental picture.

Working with culture in the classroom is essential to broaden students' visions of the world, to awaken their curiosity, their interest in discovering the unknown, in communicating in other languages and meeting new people.

Getting to know new cultures enhances attitudes of respect, tolerance and empathy, improving social relations and intercultural learning, so beneficial to achieve a comprehensive development.

PREPARATION

TIMING

- 15 minutes to look for the hot springs and choose the best option.
- 5 minutes to observe and to analyze the domus.
- 5 minutes for the students to share their proposals.



MATERIALS

- Digital devices with Internet connection and the Google Earth application.
- Pencils, paints, felt-tip pens...
- Photocopy on which to indicate the choices and proposals to be visited.

CONNECTION WITH INCLUSION

- Actively promote respect for student diversity.
- Identify possible (physical, social, cultural) barriers and take them into account when organizing the class.
- Offer the same opportunities to everyone, but move away from uniformity; the methodologies that we propose in this project will help you with this goal.
- Organize the students into heterogeneous groups in which they can develop their own capabilities and experience the possibility of helping their companions to develop both academically and personally.

TEACHING PLAN

DEVELOPMENT

Visit Pompeii

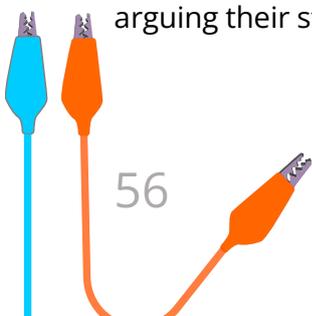
Inform the students that Tranio has received a letter from a friend who is going to visit Pompeii for a weekend. He has been researching Roman traditions and wants to go to some Roman baths, but does not know which one to choose. He has four options: Terme Suburbane, Terme Centrali, Terme del Foro and Terme Stabiane.

In this context, ask students in groups of four or five to research each of the options, to gather information about their location and characteristics and to choose which one to recommend. To visualize the hot springs, students can use the Google Earth application.

It is important that you remind students of the importance of arguing their statements and the possibility of accompanying them

NOTE: In addition to researching the Roman baths, you can ask students to look for information about other important places in Pompeii. They can search for Roman temples or buildings and create a travel guide.

NOTE: You can write a letter and ask students to read it to find out what to do, thus working on reading comprehension.



with photos or drawings that facilitate the visualization of the concepts they are pointing out.

Once all the groups have their work ready, invite them to share their work with the rest of their classmates. They can reach a consensus and write a joint recommendation on the chosen topic. They could create an information poster with Canva and put it up as a poster.

NOTE: In the book the insula is mentioned as a dwelling, ask students to look for information and create a table with the differences between the two buildings. They should include the rooms they had, such as gardens, exterior windows, bathrooms... and who they thought lived there. You can also address the social classes of the time and the distribution of power and social status.

Discovering a Domus

Next, tell the students that during the days of the visit, Tranio's friend will stay in a Domus.

- Do you know what a Domus is, what shape it might be, and who would live there?
- What part of the city would they be in? Why?

From their answers, invite them to search for Domus on Google Earth and describe what they see. To enable them to create a complete mental picture of this type of dwelling, invite them to search the internet for images of reconstructions showing the complete structure, including the internal division of space, decoration and general features.

Activity 21. Roman mathematics

Approaching mathematics through another area of knowledge such as history enhances divergent thinking and the connection of learning. In this sense, connecting both disciplines is simple, if we refer to the Roman economic system, including the instrument of the abacus, the expression of Roman numerals and the performance of mathematical operations with them.

PREPARATION

TIMING

- 15 minutes to carry out operations with the abacus.
- 15 minutes to experiment with Roman numerals.
- 5 minutes to comment on the experience.

NOTE: If you do not have an abacus, you can draw its structure on cardboard and use plugs or pieces of colored cardboard as counters. The important thing is for students to be able to carry out the mathematical representations and operations in a manipulative and visual way.



MATERIALS

- Base 10 abacuses.
- Pencils, paints, felt-tip pens...
- Photocopy on which to point out the steps of the abacus.
- Photocopy with the Roman numerals and the operations to be completed.

CONNECTION WITH GENDER QUESTIONS

- Remember to incentivize student participation and motivation. Use positive language and reinforcement.
- Encourage students to participate during the classes and to assume responsibilities within the dynamics of the classroom.
- Create heterogeneous groupings organizing rotating roles in which the students and their companions have specific responsibilities.
- Include figures with female references in the explanations. Highlight their relevance and their involvement in their work.

TEACHING PLAN

DEVELOPMENT

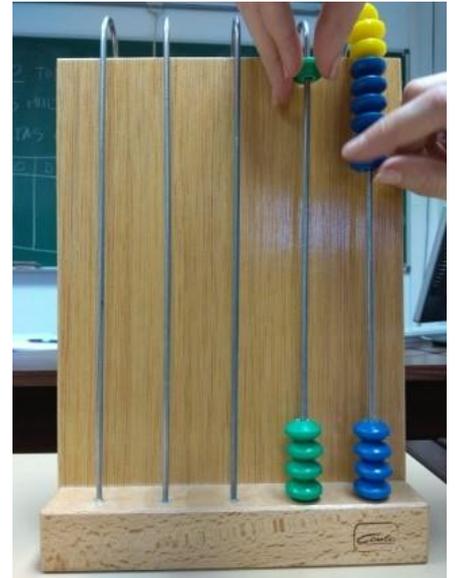
Operations on an abacus

After dealing with different aspects of Roman culture, ask your students about the economic system of the time.

- How do you think it was organized? How were accounts and mathematical operations carried out?
- Did calculators exist, and any other type of element to make operations easier?

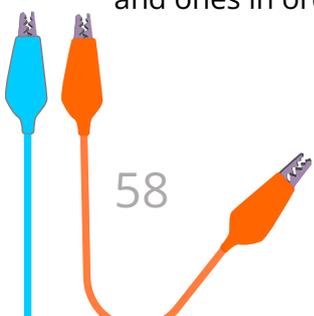
Based on their answers, invite them to use a base 10 abacus to represent and perform operations of addition and subtraction.

Explain the placement of the balls in each bar or column and the rules for performing the operations. It is important that they become familiar with the equivalences between hundreds, tens and ones in order to carry out the transfers correctly.



NOTE: They may find it easier if they draw the phases, and it will be more visual and easier to understand.

5th EPO student: "The project on Pompeii has been very cool, I really liked using an abacus and doing additions and subtractions with it. That's how math is more fun".



In addition to performing the operations, ask them to explain the process on a piece of paper, pointing out the ball changes.

NOTE: You can show them pictures of Roman buildings with numbers carved on their façades. Ask students to decipher the numbers and think about whether they have ever seen Roman numerals on buildings, statues or streets.

Student of 5thEPO: "The project on Pompeii has been very cool, I really liked using an abacus and doing additions and subtractions with it. That's how math is more fun."

Roman numerals

Once they have mastered the abacus, have students think about the Roman mathematical system.

- Did they use numbers like the ones we use today? Have you heard of Roman numerals? Do you know of any examples?
- How did they do the operations? How did they add, subtract and multiply?

Based on their answers, show them the Roman numerals, their equivalents to today's numbers and how addition and subtraction are done.

Then invite them to represent some Roman numerals and to break them down. They can also perform simple operations.

Activity 22. Women in Ancient Rome

The role of women in society has changed over time. It is interesting to analyze the role of women in each stage of history and to observe how in Ancient Rome they occupied a prominent place in comparison with other ancient societies.

It is important for students to be aware of this evolution to promote gender equality and equal opportunities. It is especially important to promote the value of women in science to reduce the gender gap in this field.

PREPARATION

TIMING

- 5 minutes to recall the story and to go back to the reading book.
- 15 minutes to read news and information about Roman women.
- 15 minutes to prepare a description of a Roman woman.
- 5 minutes for reflection.

NOTE: In case you do not have enough digital devices and/or Internet connections, provide students with the printed information. Make sure to include data on the way women dressed, their responsibilities and tasks, their social positions, and their decision-making roles...

MATERIALS

- Digital devices with internet connection.
- Pencils, paints, markers....

CONNECTION WITH THE RESPONSIBLE CITIZEN

- Remind the students of the importance of respecting the norms of conviviality, in the school environment and family and social life.
- Use debates and role plays to present reality-based situations that raise student awareness, in relation to their responsibility for improving their physical and social environment. Ask them to propose actions to solve or to improve those situations.
- Set out visits and programs of shared events with local associations, so that the students collaborate in the search for solutions within their real environment.

TEACHING PLAN

DEVELOPMENT

Women in Rome

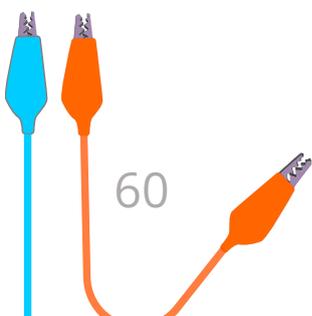
From the reading book, ask students about the women.

- What clothes did they wear, and is there a difference with men's clothes?
- What would they do, would they have a job, in what?
- As women, could they be doctors, teachers, architects...?

After proposing their hypotheses, invite the students to read news and information about a Roman women's life. They should pay attention to clothing, responsibilities, social position...

Once they have gathered all the information, ask them to imagine a woman and describe her, incorporating all aspects of her life: family, social, work, economic position...

Once all the students have their descriptions ready, invite them to share them with their classmates and to reflect on the topic.



- Do you think it was compulsory to get married, and now, is there an ideal age to get married and which one?
- Would you like to have been a woman in Ancient Rome? Why?
- Do you see any change compared to today? Which one? Why do you think that is?
- Do you think that women are more valued now, in what ways, and why?

Activity 23. We are lecturers

The ability to express oneself orally in an appropriate way is essential in everyday life. Learners must learn to communicate information clearly, simply and coherently.

They must learn not only to take care of the form of the content, including connectors, while avoiding idiomatic expressions, but they must also pay attention to non-verbal language, both gestures and movements, as well as voice modulation.

PREPARATION

TIMING

- 5 minutes to choose a topic for the lecture.
- 5 minutes to draw up an outline.
- 20 minutes to search for information and to organize it.
- 20 minutes for oral presentations.

MATERIALS

- Digital devices with internet connection.
- Pencils, paints, felt-tip pens, paper...

CONNECTION WITH DIGITAL WORLD

- Create a blog with restricted access in which there are curiosities on the topics that are worked, proposals for additional activities and reinforcement exercises.
- Use digital platforms such as Padlet to strengthen the debate and the divulgation of ideas and opinions among the students.



- Strengthen the search for information in digital sources. It is fundamental to emphasize the importance of comparing data.
- Work on the positive aspects (sustainability, agility, etc.), but also on the negative aspects of the networks (cyber bullying, digital dependency, identity phishing, etc.) and propose, together with families, simple actions to minimize them.

TEACHING PLAN

DEVELOPMENT

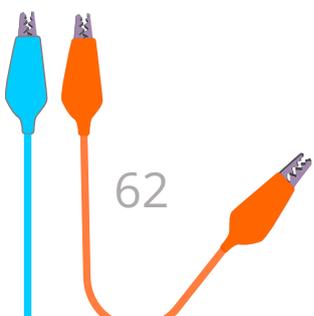
Conference

As a conclusion to the project, invite the students to become lecturers. To do so, divide the class into groups of four or five people and allow each group to select a topic from the ones previously discussed to prepare an oral presentation to be given in front of the other pupils in the school.

Inform them that they should prepare a five-minute presentation on the chosen topic and that it is very important that all members of the group speak and participate. They can use Power point, Prezi or posters, either handmade or printed with the Canva application, to help their presentations.

It is important that you remind them of the importance of establishing a plan beforehand, organizing the data in an outline and then looking for the information to structure it coherently. In addition, it is recommended that they include images or graphics that help to better understand the information, avoiding long paragraphs.

5th EPO student: "I really liked the Pompeii project, I would repeat it because it is very fun and we learn more about the things of the world."



Evaluation

Preparation

Evaluation is a fundamental tool in the teaching-learning process. It has to be integrated in the daily activities of the classroom, because that is the only way it will be turned into a reference point for correcting and improving the educational process.

It is important that it is conceived from a global perspective, in which not only are the conceptual concepts taken into account, but also the procedural and the attitudinal contents. Likewise, it is recommendable to include a skills evaluation, taking into account the previously established objectives.

In this sense, the incorporation of all those elements must not be centered on mastery of the foreign language or the scientific contents that have been worked, but on their progress and learning with respect to the previous knowledge of each student.

Implementation in the classroom

Kahoot

NOTE: In case of not having sufficient digital devices for all students, you can use Plickers, a similar application in which the selection of responses is done by turning a QR-type code and scanning it with a bar-code reader application installed on a smart phone with a camera.

The use of Kahoot is proposed.

It is a digital application with which you can create test-style competitions. The possibilities are numerous, because you can edit the questions and answers, modify the time and response options, and include photographs and videos.

Due to its ludic and dynamic nature, it will lower the stress levels of the students that are linked to the completion of conventional tests, such as exams, which will improve academic results.

PREPARATION

TIMING

- The time will vary in accordance with the number of questions and the time that is allowed for each answer. In

the option that is proposed here, the maximum time will be 7 minutes.

MATERIALS

- Computer and projector to display the questions in the classroom.
- Digital device to select the answers.

CONNECTION WITH EVALUATION

- Remember to use evaluative methods and instruments that are in accordance with the proposal for the development of competences and the active and collaborative methodologies that have been proposed. These frameworks will strengthen self-evaluation and involve the students in the evaluation process.
- It is important to carry out an initial evaluation, another one during the activities and a final one to perceive the progress of the students.

TEACHING PLAN

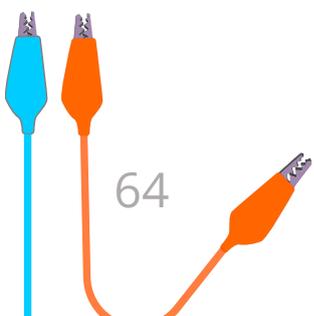
DEVELOPMENT

Each student or group of students will need a digital device such as a computer, tablet or smartphone to answer the questions. They can enter the application with a code and enter their nicknames with which they wish to play.

They can then start the course. The questions will appear one by one, and subsequently the possibilities for response, associated with a particular color.

Each student or group will choose a color that they think is the right answer with their device. Once everybody has answered or when the time has ended, they are told whether the answer is right or wrong and a ranking of positions with names of participants will be projected on the wall. The application summarizes the right answers for the ranking, but also the speed of the response.

5th-year primary-school student: "I liked it a lot, it was great fun, it was like being in a TV competition".



The positions can be modified with each question, until arriving at the end of the course in which a podium for the three winning positions is displayed.

Evaluation rubrics

NOTE: It is essential that the students rely on them from the start, so that its use is to be effective. In that way they can know what their strengths are and which aspects they can improve.

The rubrics are documents in which the specific characteristics of a product, project or task are described at various levels of effort. In this way, they provide information on what is expected from the work of the student, which will make a more objective valuation possible, will facilitate feedback and will strengthen self-evaluation.

From this perspective, they constitute an instrument that facilitates the progressive evaluation of the teaching-learning process, because it provides detailed information on each criterion, indicating the degree to which it has been achieved. All these features make it both an evaluation and a learning tool, simultaneously.

With regard to their characteristics, it is important that they establish a quality-of-compliance grading of the standards, which have to be related with curricular content, and have to be coherent with the educational objectives and with the level of student development.

In what follows, some examples are proposed to complete self-evaluations, co-evaluations, evaluations of group members, and evaluations of both the learning process, and oral presentations.

SELF-EVALUATION

DATE

STUDENT

Evaluate your work drawing piroclastos above each volcano.



Always



Sometimes



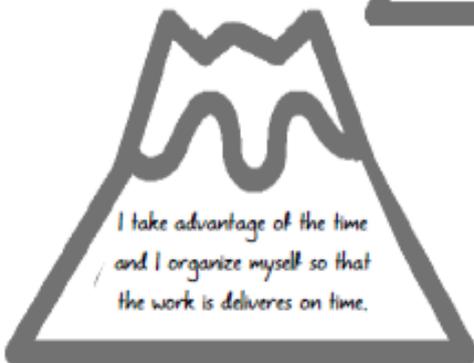
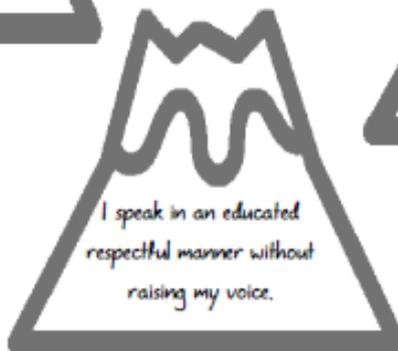
Often



Hardly ever

Total

/ 20



GROUP CO-EVALUATION

DATE

MEMBERS

GROUP

The team paints the volcano to evaluate the work jointly.

- 1 Hardly ever
- 2 Sometimes
- 3 Often
- 4 Always

TOTAL

/ 16

ATTITUDE

We listen to the others, respecting each person's turn to speak and without showing disrespectful attitudes.

COOPERATION

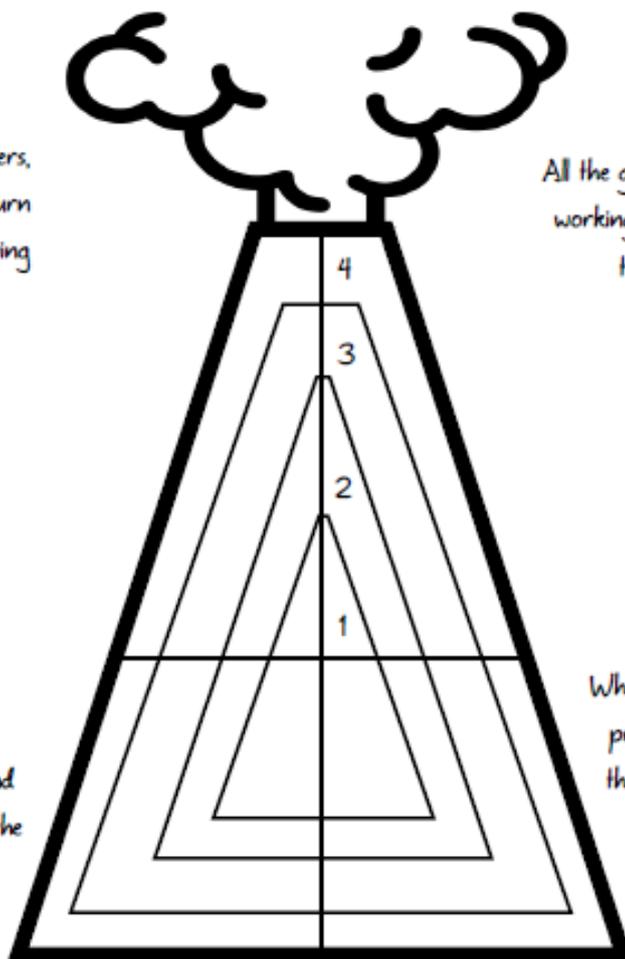
All the group has collaborated, working in a cooperative way to achieve the objective.

PARTICIPATION

The whole group has participated in the activities, giving ideas and suggestions to improve the work.

CONFLICT RESOLUTION

Whenever there have been problems, we have solved them among us all, talking and jointly finding a solution.



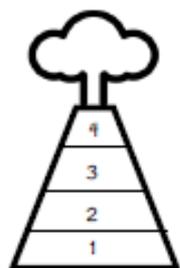


EVALUATION OF THE ORAL PRESENTATION

DATE

GROUP

The team paints the volcanos to jointly evaluate the work.



- 4 Always
- 3 Often
- 2 Sometimes
- 1 Hardly ever

TOTAL



All group members participate in the presentation.



They speak slowly, clearly and loudly enough.



They use acceptable postures and gestures, and they are acting normally.



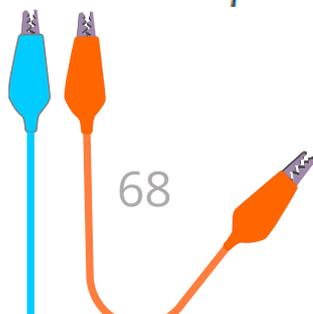
They demonstrate understanding of the topic and the process followed.



They use the specific vocabulary learnt during the activities.



They have learnt to respond to the questions that have been raised.



GROUP MEMBERS EVALUATION

DATE

WHAT HAVE WE DONE?

Write the name of each classmate on a volcano and evaluate their work.

1	2	3	4
---	---	---	---

Always

1	2	3	4
---	---	---	---

Sometimes

1	2	3	4
---	---	---	---

Often

1	2	3	4
---	---	---	---

Hardly ever

Total

/ 16



He/she contributes ideas, listens to suggestions and respects the ideas of the other group members.

1	2	3	4
---	---	---	---

When there is a problem, he/she proposes alternatives and pays attention to other opinions to jointly take the final decision.

1	2	3	4
---	---	---	---

He/she makes an effort to work in a team helping other classmates when necessary.

1	2	3	4
---	---	---	---

He/she manages the time well and is organized so that the work is delivered on time.

1	2	3	4
---	---	---	---

Total

/ 16



He/she contributes ideas, listens to suggestions and respects the ideas of the other group members.

1	2	3	4
---	---	---	---

When there is a problem, he/she proposes alternatives and pays attention to other opinions to jointly take the final decision.

1	2	3	4
---	---	---	---

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1	2	3	4
---	---	---	---

He/she manages the time well and is organized so that the work is delivered on time.

1	2	3	4
---	---	---	---



[Empty dashed box for name]

Total

/ 16



He/she contributes ideas, listens to suggestions and respects the ideas of the other group members.

1 2 3 4

When there is a problem, he/she proposes alternatives and pays attention to other opinions to jointly take the final decision.

1 2 3 4

He/she makes an effort to work in a team helping other classmates when necessary.

1 2 3 4

He/she manages the time well and is organized so that the work is delivered on time.

1 2 3 4

[Empty dashed box for name]

Total

/ 16



He/she contributes ideas, listens to suggestions and respects the ideas of the other group members.

1 2 3 4

When there is a problem, he/she proposes alternatives and pays attention to other opinions to jointly take the final decision.

1 2 3 4

He/she makes an effort to work in a team helping other classmates when necessary.

1 2 3 4

He/she manages the time well and is organized so that the work is delivered on time.

1 2 3 4

[Empty dashed box for name]

Total

/ 16



He/she contributes ideas, listens to suggestions and respects the ideas of the other group members.

1 2 3 4

When there is a problem, he/she proposes alternatives and pays attention to other opinions to jointly take the final decision.

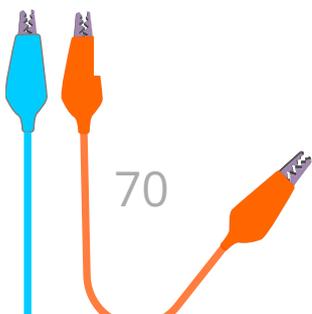
1 2 3 4

He/she makes an effort to work in a team helping other classmates when necessary.

1 2 3 4

He/she manages the time well and is organized so that the work is delivered on time.

1 2 3 4



EVALUATION OF THE TEACHING PROCESS

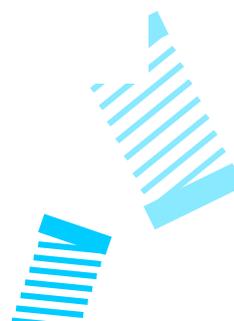
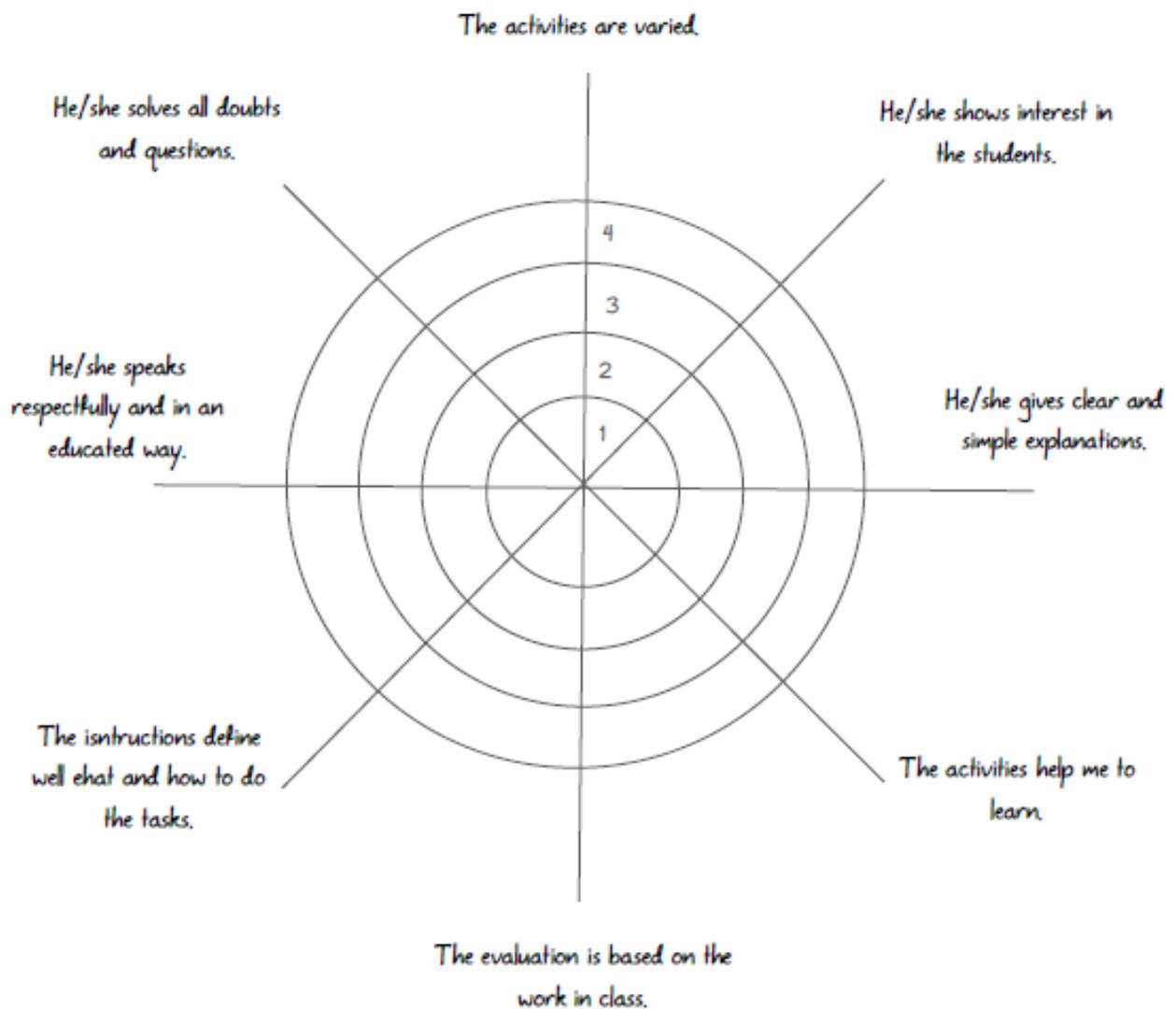
DATE

Evaluate the learning process painting a volcano on the corresponding line.

- 1 Hardly ever
- 2 Sometimes
- 3 Often
- 4 Always

TOTAL

/ 32





S e L F i E

STEAM educational approach and foreign language learning in Europe

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